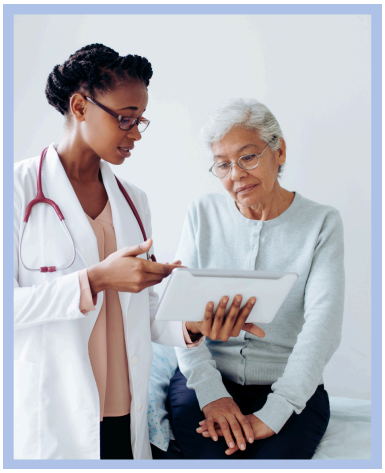
Vaccine Evaluation Center

2025

Winter **Newsletter**

www.bcchr.ca/vec | @ vec.ubc | vecstudies@bcchr.ubc.ca

Current Study Updates



Canadian National Vaccine Safety Network (CANVAS)

- The CANVAS network is a national platform that monitors vaccine safety. The purpose is to monitor health events after a vaccine, using an online survey.
- Survey responses will be collected from fall 2025 to early 2026 for COVID-19 and flu vaccines, with an aim to enroll 300,000 individuals across Canada.
- CANVAS compares results for individuals who received vaccinations against COVID-19, flu, or both simultaneously.
- A recent CANVAS study (www.shorturl.at/y4ypC) looked at the safety of getting the COVID-19 vaccine and the flu shot simultaneously, in individuals with autoimmune diseases. Findings include:
  - The flu shot was found to be safe, with similar or lower rates of health events compared to individuals who did not get the flu shot
  - Mild to moderate side effects were more common after getting an mRNA COVID-19 vaccine than in those who weren't vaccinated. The number of these side effects, however, was about the same when the COVID-19 vaccine was given by itself or at the same time as the flu shot.

Visit **www.canvas-network.ca** to learn more about ongoing work and other CANVAS projects!

Avian Influenza Vaccine Trial

- Avian influenza is a viral infection that affects birds and less commonly, other animals and also humans, who may have had close contact with infected wildlife.
- This study is evaluating the immune response and safety of two doses of a Health Canada approved avian influenza vaccine given either 3 weeks or 8 weeks apart.
- The results will provide valuable information to support public health decisions on the most effective way to use this vaccine.
- This study will complete enrolment in December 2025 and first results are expected in early 2026.

Quadrivalent HPV Vaccine Evaluation Study (QUEST-ADVANCE)

- This study is evaluating the long-term protection of the human papillomavirus (HPV) vaccine in women and men and trying to determine how long protection lasts.
- QUEST-ADVANCE is one of the largest long-term evaluations of the HPV vaccine in Canada, with approximately 15 years of follow-up post vaccination.
- As the HPV vaccine schedule in BC shifts from two doses to one dose for people age nine to 20, this study continues to provide real world evidence and insights into the effectiveness of the one dose HPV program
- As of October 2025, the study has enrolled more than 2,050 participants. Out of these:
  - More than 90% have completed their annual study survey
  - More than 60% have completed their study swab for each of study visits 1 and 2
  - 450 clinic visits have been completed

Community Resources

BCCH Immunization Clinic
BC Children's Hospital Family Immunization Clinic provides all publicly funded immunizations to patients at BC Children's Hospital and their friends/family.

www.bcchildrens.ca/clinics-services/family-immunization

Register to get Immunized
The 2025-6 respiratory illness season is here. You can register yourself or someone else, like a parent or child to get the flu or COVID-19 vaccines in BC.

www.getvaccinated.gov.bc.ca

Medical & Vaccine Misinformation
VEC investigator & UBC professor, Dr. Devon Greyson, speaks to the misinformation around acetaminophen and vaccines during pregnancy in a recent news article, see the link below.

www.shorturl.at/Mb0Cj

What Parents Need to Know about School Vaccinations
VEC director, Dr. Manish Sadarangani, and investigator, Dr. Kevin Meesters, share how parents can help support their child's vaccination and details on what is provided in BC schools, see below.

www.shorturl.at/DTxsH

Prevention of Antimicrobial Resistance via a One Health Approach

- Antimicrobial resistance (AMR) occurs when bugs (bacteria, viruses, fungi, parasites) become resistant to antimicrobial medicine. As resistance develops, these medicines may lose their effectiveness, making infections harder or sometimes impossible to treat.
- The One Health approach (www.who.int/health-topics/one-health) looks at the health of people, animals, and the environment together via an interconnected approach.
- PREVENT-AMR is an interdisciplinary research cluster comprised of research experts and health leaders in BC who work together to address the global challenge of AMR through preventative measures.
- The cluster spans five themes: surveillance and early detection, prevention strategies, environmental pathways, policy and public health, and equity and access.

Learn more here: **www.preventamr.ubc.ca**

VEC Publications

SCAN QR CODE TO READ

Middeldorp, M., Donken, R., **Nirmal, A.**, Smith, B., Citlali Marquez, A., **Bettinger, J. A.**, Brisson, M., Burchell, A. N., Dobson, S. R., Dawar, M., Franco, E. L., Grennan, T., Krajden, M., Mayrand, M. H., McNeil, S., Naus, M., Sauvageau, C., Singer, J., Smith, L. W., Ogilvie, G. S., & **Sadarangani, M.** (2025). **Quadrivalent HPV Vaccine Evaluation Study with Addition of the Nonavalent Vaccine (QUEST-ADVANCE): protocol of an observational cohort study**.

In *BMJ Open*.

Dhutt, G. S., Bettinger, J. A., & Greyson, D. (2025). **Improving vaccine communication to the often-overlooked young adult population: A qualitative study of 20-29 year olds in British Columbia, Canada.**

In *Human Vaccines & Immunotherapeutics*.

Hunter, O. F., **McClymont, E., Lau, O., Bettinger, J. A.**, Castillo, E., Crowcroft, N. S., Dubé, È., Elwood, C., Gantt, S., Halperin, S. A., Langley, J. M., Money, D., Naus, M., **Sauvé, L.**, Top, K. A., van Schalkwyk, J., & **Sadarangani, M.** (2025). **Knowledge gaps and research priorities regarding vaccination in pregnancy: A Canadian perspective from the prevention of infections in the maternal-infant dyad (PRIMED) consortium**.

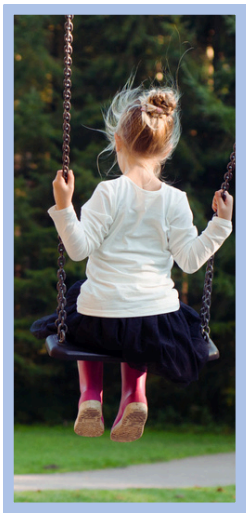
In Vaccine.

See more at: **bcchr.ca/vec/research/publications**

Designing Advanced RNA Vaccines to Address Antimicrobial Resistance

- Vaccines can address AMR by reducing infections. Importantly, vaccines can reduce infections that are both treatable and untreatable by antimicrobial medicines.
  - This leads to a decrease in antimicrobial use, as there are less infections to treat, which in turn makes it harder for bugs to become resistant.
- UBC's AVENGER team (www.shorturl.at/FDDbQ) is working on developing new RNA vaccines that target bacteria that are high risk for antimicrobial resistance: *Klebsiella, Staphylococcus aureus* (including MRSA bacteria), and *Streptococcus pneumoniae* (pneumococcal disease).
- We are setting up to collect these bacteria from children admitted to 16 pediatric hospitals across Canada starting in early 2026.
  - Once we have these bacteria, we'll look at the DNA. This will allow us to identify shared genes across different species, which we can use to design new vaccines.
  - Read more at www.popcornpediatrics.ca/amr-study
- We are also developing tests to evaluate our new vaccines so we can predict which ones will work best.

Optimizing Vaccine Uptake in Pediatric Solid Organ Transplant (SOT) Recipients in BC



- This study compares vaccine uptake before and after the implementation of measures to increase vaccine uptake among SOT recipients, such as routine annual vaccine reviews and written recommendations to patients in transplant clinic.
- The proportion of fully vaccinated transplant recipients increased by nearly 20% from 2020 compared to 2024, showing that the measures led to improved uptake.
- SOT recipients, however, still remain under-immunized. Further efforts should focus on vaccines that require additional doses or are recommended specifically for transplant recipients, such as human papillomavirus (HPV) and 20-valent pneumococcal conjugate vaccines.