

Addendum to BCCDC Report 2012

To be added under Communicable Disease Prevention and Control Services Highlights
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Influenza & Emerging Respiratory Pathogens

The BCCDC Influenza & Emerging Respiratory Pathogens team performs surveillance, conducts research and provides policy advice related to influenza and other emerging respiratory pathogens as well as pertussis.

Surveillance bulletins summarizing community influenza and other respiratory virus activity in the province are distributed to more than 700 health care and other recipients across the province to guide real-time public health messaging and clinical care decision-making. These are updated and distributed weekly during the winter period and on as needed basis through the rest of the year.

In 2011, the team contributed to evidence reviews and recommendations for the BC Communicable Disease Policy Committee to update routine programs including vaccine options for the elderly and dosing/formulation considerations for the young as well as review of pertussis program options for adults both targeted (i.e. cocooning) and general (i.e. adult booster dose).

During 2011, the Influenza & Emerging Respiratory Pathogens Team also led and concluded a number of important initiatives and evaluations in support of public policy in Canada and abroad. Funding for these initiatives was provided by the Public Health Agency of Canada, the Michael Smith Foundation for Health Research and the Canadian Institutes of Health Research.

Select notable findings and achievements informing public policy as published in international peer-reviewed journals during 2011 include:

- Randomized controlled trial to assess the optimal dosing of influenza vaccine for infants/ toddlers
 - Landmark paper leading to change in historic immunization policy by the National Advisory Committee on Immunization (NACI) for Canada
- Leadership of the only platform in Canada to monitor influenza vaccine effectiveness (VE) through a routine sentinel surveillance system involving the five largest provinces of Canada
 - Real-time assessment of virus evolution, vaccine relatedness and vaccine protection with implications for mid-season messaging around adjunct control measures and annual vaccine forecasting
 - The system has been nationally recognized in writing by the Council of Chief Medical Officers of Health of Canada as providing “timely and important information” with contribution also to World Health Organization discussions around vaccine development and VE monitoring needs
- Clinical trial to evaluate cross-lineage influenza B vaccine responses in young children
 - Relevant to development efforts toward quadrivalent influenza vaccine formulations
- Persistence of adjuvanted pandemic influenza vaccine immunogenicity and effectiveness through subsequent seasons
 - Relevant to understanding potential enhancements offered by adjuvanted formulations
- Immuno-epidemiologic patterns by age and their correlation with surveillance observations
 - Relevant to risk assessment and age-specific vaccine and antiviral policies
- Exploration of methodological issues in the evaluation of influenza vaccine in the elderly.