THE UNIVERSITY OF BRITISH COLUMBIA
Continuing Professional Development
Faculty of Medicine

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WEBINAR RESOURCES: ADOLESCENT AND ADULT VACCINATION UPDATE: WHAT YOU NEED TO KNOW

General Resources

BC Centre for Disease Control

- A variety of resources including immunization manual, childhood and adult immunization schedules, supplementary Q & As, immunization courses, etc: bccdc.ca/health-professionals/clinical-resources/immunization
- Immunization Manual. Subscribe to Admin Circulars to keep up to date: bccdc.ca/health-professionals/clinical-resources/communicable-disease-control-manual/immunization
- PDF: Vaccines Recommended for Adults in BC Online Quick Reference Guide For Health Care Providers: bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Immunization/Vaccine%20Info/Vaccines-Recommended-Adults.pdf

Immunization Records

- Submitting or Updating Immunization Record: immunizationrecord.gov.bc.ca/
- CareConnect: phsa.ca/health-professionals/clinical-tools-applications/careconnect
    - For assistance with Community-Based enrolment email: private.careconnect@phsa.ca

Online Course

- UBC CPD's Pearls for Immunization Practice: https://ubccpd.ca/learn/learning-activities/course?eventtemplate=38

Addressing Vaccine Hesitancy

- PDF: Addressing Vaccine Hesitancy: Immunization Communication Tool (ICT): bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Immunization/Vaccine%20Safety/ICT-2021.pdf

    - To receive a hard copy, contact your local health unit, or email katharine.chilton@bccdc.ca

- PDF: A 5-step approach to discussing vaccines and addressing vaccine hesitancy: bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Immunization/Vaccine%20Safety/bccdc-vh-5-steps.pdf

Specific Vaccine Information

- COVID-19**:** bccdc.ca/health-professionals/clinical-resources/communicable-disease-control-manual/immunization/biological-products
- Shingles Vaccine for First Nations Clients: fnha.ca/Documents/FNHA-Health-Benefits-Shingles-Fact-Sheet.pdf

Resources for the Public

- BC Centre for Disease Control: bccdc.ca especially for COVID-19 vaccines
- Immunize BC: immunizebc.ca for all other vaccines
    - immunizebc.ca/posters-pamphlets to display in waiting rooms
- Immunize Canada: immunize.ca
- The Vaccine Safety Net is a global network of websites, evaluated by the World Health Organization, that provide credible information about vaccines: vaccinesafetynet.org

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UNANSWERED QUESTIONS: ADOLESCENT AND ADULT VACCINATION UPDATE: WHAT YOU NEED TO KNOW

Questions	Answers
What vaccines should a healthy woman get at each age and which vaccines are covered by MSP?	If she received her childhood and adolescent vaccines, then Td every 10 years is the only vaccine she needs. Influenza will be available each fall. When 65 or so, pneumococcal and zoster vaccines are recommended. Depending on her age (e.g., whether she received HPV) and travel, other vaccines may be recommended. More information is here: https://immunizebc.ca/adults
What new vaccines should we be aware of that might become available in the near future?	The 'more' multivalent conjugate pneumococcal vaccines PCV15 and PCV 20 for both adults and children are going through various approval processes and PCV20 is already being marketed for adults. RSV long acting monoclonal antibody and several vaccines are on their way. RSV vaccines will have application for older adults, pregnancy, and infants.
Is there anything new we should be aware of with respect to recommended and available travel vaccines?	No new travel vaccines coming down the pipeline for travellers in the near future. Recommendations for how we use existing vaccine products, according to risk of travel -associated illness, itinerary, style of travel and destination are continually being refined. Pre travel health providers utilize up to date evidence- based resources, and a shared care approach with travellers wrt vaccine recommendations. Nuances wrt prescribing for malaria prophylaxis and avoidance of other travel associated illness are always changing. Ensuring travellers are utd with the routine immunizations for Influenza, COVID, MMR, and Td is most important from the primary care perspective for people who might not seek advice in a pre-travel clinic
Could you please speak about the different strategies to use with someone who is vaccine hesitant (perhaps scared or unsure) as compared to	For individuals who are scared or unsure - please see the Immunization Communication Tool (ICT) 1) Evidence based strategies for addressing vaccine hesitancy pg 5 and 2) the 5-step approach to discussing vaccines and addressing vaccine hesitancy pg 9. Explore the reasons for the hesitancy, ask if you can address

someone who seems strongly opposed to vaccines (perhaps due to adherence to anti-vaccine conspiracy theories)?	the concern and provide information to address the issue. 3) Refer to Section 2 of the ICT: Answering common questions about vaccines pg 11 for the topic of concern if applicable. After providing information and verifying understanding, it can be helpful to summarize key messages. Ask again if you can provide the vaccine. For those who are strongly opposed, offer credible immunization resources such as ImmunizeBC and leave the door open for further discussion if the individual is receptive.
I have a patient travelling with an 8-month-old infant to Asia for two months. I am concerned as I've heard that there is a measles outbreak in the region and am wondering how to advise these parents.	Infants as young as 6 months of age can be offered MMR vaccine. Protection may be limited due to remaining immunity from the mother, but increasingly mothers have vaccine derived rather than wild type immunity. Such infants will still need to receive two doses of MMR, with the first at 12 months of age and the second at 18 months or school entry (BC, given as MMRV).
Can you comment on the new vaccines for Malaria and Dengue fever?	Not for travellers at this time! Mosquirix has been approved for use in sub Saharan Africa for infants ages 6 weeks to 17 months in countries highly endemic for P. falciparum. In studies, it decreased malaria infection in this population by 24-43%, and was approved for use on a more widespread population basis in Dec 2022. As a bonus, this vaccine contains surface proteins of both P. falciparum parasite and Hepatitis B, and induces double immunity. Dengvaxia was approved in 2015 for use in Brazil, Mexico and Philippines and is currently used in highly endemic countries only for children ages 9-16 who have had proven prior dengue infection. In those who had not previously been infected, this vaccine actually increased the severity of dengue infection after immunization!
I was bitten by a dog in Thailand in 2003 and received a post exposure rabies vaccine series when I was back in Canada. What does this mean if I am bitten on a future trip to a country where there is rabies in domestic and wild animals?	Having received a WHO approved rabies post exposure series in the past 'counts' as pre-exposure prophylaxis for future at risk animal encounters. If you receive a subsequent bite, you require two further doses of Rabies vaccine, but will not need Rabies Immune globulin, which is hard to access in many countries. If you have not had pre-exposure rabies vaccine, you will require 4 doses of Rabies vaccine plus Rabies immune globulin – a very expensive and time- consuming proposition. You should get expert advice after each incident. Rabies is a fatal infection!
I often recommend the combined Hep A and Hep B vaccine for people in my practice who will be travelling. Can you comment on this convenient product?	It's a great way to provide immunity against both hepatitis A and B to those not previously immunized. Information about it is here. What you should know is that the antigen content of Hep A in each adult dose is equivalent to a pediatric dose (half of an adult dose)

	so that the adult traveller will need sufficient time to receive at least two doses prior to travel (i.e. one month). Any person who has previously received Hep B vaccine in the school- based programs does NOT need to receive this product as we consider them to have lifelong Hep B immunity
How do we explain to patients why they need two different kinds of pneumonia vaccines 1 year apart? I know the doctor whose practice I have taken over usually does PCV-13 then PPSV-23 a year later. Is this recommended. The free one does 23 strains but the paid one only 13! Are they the same strains?	The current publicly funded program only provides PPV23 for older adults. For those who are willing to purchase a conjugate vaccine, the best choice is likely the PCV20, as that will be the only vaccine they will need. If they choose to purchase PCV13 (which in BC is 'free' only for the childhood program and select high risk adults), then they can receive it first, followed by PPV23 8 weeks later for broader serotype protection. The US CDC materials (where the same vaccines are available) outline the PCV13 and PPV23 schedule on this page (scroll to 'BOX'). This page has information about the serotype coverage. The conjugate vaccines provide priming immunity and are boostable. The polysaccharide does not, and the longer interval after PPV is recommended to avoid blunting the polysaccharide derived response. The preferred schedule if using PCV13 or PCV15 is to prime with PCV, and boost with polysaccharide PPV.
How do I get a hard copy of the Immunization Communication Tool?	From your local health unit, or email katharine.chilton@bccdc.ca
Which covid bivalent vaccine is most effective: Pfizer or Moderna?	These have not differentiated themselves in clinical trials nor vaccine effectiveness studies and are considered comparably effective.
Please remind us of the age group of adults that should get a MMR booster.	Once fully vaccinated (two doses) boosters are not needed. For those adults who have not received two doses, you can consider them immune (no doses required) if they were born before 1970; if they are health care workers, this 'rule' is if they were born before 1957. Otherwise, they need two doses. If there is any doubt about prior immunity through infection, offer the vaccine.
Hepatitis B non-responders in adults - could I ask what sort of prescription would I be giving to them to have a repeat dose?	If an adult has not responded to 2 complete series of hepatitis B vaccine, don't give more vaccine, but consider them susceptible and manage future exposures as such. See information at the bottom of this page.
Why do only Indigenous babies get the Hep A vaccines?	Eligibility for Indigenous children is all the way up to 'under 18 years old', residing on and out of First Nations communities. This program was introduced in BC because of recurrent outbreaks in First Nations communities where transmission is facilitated because of a variety of conditions. No more outbreaks have occurred after introduction of this vaccine program in 2012.

Should we suggest TdaP at least once (or more) as a booster as an adult after Gr. 9 dose?	If there is a specific reason to do so (newborn in the household), then this can be considered. However, immunity to pertussis will wane quickly, after 2-3 years, and repeat immunization of adults is only recommended in pregnancy (to provide passive immunity to the infant in the weeks prior to their own active vaccination starting at 2 months of age).
Sometimes I see patients who are immune to part but not all of MMR on serology. When I see this, I assume they've had at least one dose, so then will just give 1 booster dose and not recheck serology. Is this best practice?	There is no need to check serology in healthy individuals. If they have not received two doses of MMR vaccine and are born on/after 1970, just give them two doses of MMR. If they have proof of a single dose, give the second dose to complete the series. See above.
What is the difference between Tdap vs DTaP?	Tdap has lower antigen content and is intended for those aged 7 years and older. DTaP is for those under 7, but this product is not specifically used in BC because we use the heptavalent product in infancy, and boost with the pentavalent at 18 months. BC and the rest of Canada switched to use of Tdap-IPV (instead of DTaP-IPV) for the school entry booster because it is associated with fewer large local reactions, which in some cases were being misdiagnosed and managed as cellulitis. The childhood schedule is here.
It Hep A vaccine x2 given in early childhood, should there be a booster in adulthood?	No. A two-dose series is complete and no booster doses are recommended. See the hepatitis section of the BC Immunization Manual.
Should a high-risk individual who presents for the first time at age 69 get the 1st dose of pneumo-23 right away then get a booster 5 yrs later? And is there a minimum interval between pneumo-23? Say a high-risk patient presents for the first dose of pneumo-23 at age 64, when is the 2nd dose?	In the BC schedule a booster dose of PPV23 is not recommended. At present, they should receive a single dose. We expect PCV20 may be introduced in the future, and this will replace use of PPV23.
Should someone get Gardasil 9 vaccine if they previously had the Gardasil 4 vaccine?	They can. Likely they can just receive a single dose. It will give them broader coverage against oncogenic strains beyond type 16 and 18.
What is the rational for MenC for 2-month old's if cases have decreased?	We don't stop vaccinating because disease rates decline. Disease rates decline in highly vaccinated populations. But what will be considered is whether we should move to use of quadrivalent conjugate vaccines instead. These will increasingly replace the 'C only' conjugate vaccines because quadrivalent vaccines that perform well in young children are now available.

Can you speak to HPV vaccination and the types of cancers it can prevent?	The currently approved indications for the 9 valent HPV vaccine are listed on the first page of the Health Canada approved product monograph.