IMMUNIZATION COMPETENCY PROGRAM OVERVIEW

TABLE OF CONTENTS

1. INTRODUCTION

Immunization is one of the most accepted and cost-effective health care practices in Canada today. Vaccines prevent illness and death from more than a dozen serious diseases and have fewer direct medical costs than the treatment of these diseases.

Health care providers, particularly vaccine providers, play an important role in achieving immunization coverage levels and reducing the morbidity and mortality associated with vaccine-preventable diseases. Immunization is one of the best opportunities vaccine providers have to promote health and prevent disease for clients, families and communities. Health care providers have a key role as vaccine providers, educators, and advocates for immunization.

1.1 Goal

Vaccine providers will demonstrate the knowledge and skills necessary to provide safe and effective immunization programs.

1.2 Objectives

On completion of the Immunization Competency Program, vaccine providers will be able to demonstrate the knowledge and skills necessary for safe immunization practice.

1.3 Process

The Immunization Competency Program may vary from region to region and according to the learning needs of the candidate, but it should include the following components:

- **Examination**

  The format is an open book on-line examination. A grade of a pass/fail designation is not awarded. All questions must be answered accurately and consistently according to the BC Centre for Disease Control Communicable Disease Control Manual (Chapter 2) and other recommended references.

- **Evaluation of clinical skills in administering biological products**

  The candidate will provide immunization and will be evaluated by a nursing supervisor or designate using the Immunization Skills Checklist. The evaluator will complete a separate Immunization Skills Checklist for each candidate/client encounter.

- **Documentation**

  After the Competency Program is completed, the employer may provide a certificate to the successful candidate. The employer will retain a copy of the certificate and the Immunization Skills Checklist in the employee's file.

- **Renewal of Competency**

  Immunization Competency is renewed every three years. Renewal of Competency involves an open book on-line examination and evaluation of clinical skills in administering biological products, as described above.

2. KNOWLEDGE

The content is divided into fifteen (15) competencies. Each competency is supported by learning objectives and resources for learning.

Module 1: Vaccine Preventable Disease

- **Competency:**

  Demonstrate an understanding of the rationale and benefit of immunization.

- **Learning Objectives**

  1. Describe the historical impact of immunization on the epidemiology of vaccine-preventable disease.
  2. Response to the question: Why should I be immunized when vaccine preventable diseases are so rare in Canada?
  3. Describe the key clinical features, including acute and long term complications of vaccine preventable diseases.
  4. Describe the key epidemiologic features of each vaccine-preventable disease.

- **Introduction**

  Immunization is one of the miracles of this century. With the exception of safe drinking water, no other intervention - not even antibiotics - has had such a major impact on people's health and survival. Vaccine preventable diseases will not cause significant mortality or morbidity in Canada if immunization rates remain high.

- **Resources for Learning**

  Annual Summary of Reportable Diseases
  http://www.bccdc.ca/util/about/annreport/default.htm

  Centers for Disease Control and Prevention (2009). Epidemiology and Prevention of Vaccine-Preventable Diseases (11th ed.).
  http://www.cdc.gov/vaccines/pubs/pinkbook/pink-chapters.htm

  CDC (Centers for Disease Control and Prevention, USA) website for information on the following:
  - "Why Immunize? For parents". http://www.cdc.gov/vaccines/vac-gen/why.htm
  - "What would happen if we stopped vaccinations". http://www.cdc.gov/vaccines/vac-gen/whatifstop.htm#intro

  Public Health Agency of Canada (2006). Canadian immunization guide (7th ed.). http://www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cig-gci-2006_e.pdf

- **Activity**

  Use the following internet sites to become familiar with vaccine preventable disease resources for the public:

- BCCDC- Diseases and Conditions A - Z
  http://www.bccdc.ca/dis-cond/a-z/default.htm

- ImmunizeBC - Disease and Vaccinations
  http://www.immunizebc.ca/ImmVacPrevDis/default.htm

Module 2: The Immune System

- **Competency:**

  Demonstrate a general understanding of the immune system.

- **Learning Objectives**

  1. Compare and contrast innate and adaptive immunity.

  2. Differentiate between passive and active immunity.

  3. Describe the lymphatic system

  4. Describe the development of the fetal and infant immune system.

- **Introduction**

  Knowledge of the basic functions of the immune system is useful in order to understand how vaccines work and so you can provide recommendations on their use.

- **Resources for Learning**

  British Columbia Centre for Disease Control. Section VIII - Principles of Immunology , Chapter 2 Immunization program. Communicable Disease Control Manual.
  http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

Module 3: Vaccine Development

- **Competency:**

  Integrate into practice knowledge about the main steps in vaccine development and evaluation.

- **Learning Objectives**

  1. Describe, in general terms, the process to obtain marketing approval for vaccines in Canada.
  2. Describe what can be learned about vaccines after they are approved for marketing, via surveillance activities and more formal post marketing studies.
  3. Characterize, in broad terms, the key roles and responsibilities for various stakeholders in post-marketing assessment of vaccine safety and effectiveness.

- **Introduction**

  Vaccine safety is of the highest importance and concern for all vaccine stakeholders. Knowledge of vaccine development, clinical trials, and the surveillance system will help health care providers communicate the safety of vaccines which in turn will build public confidence in vaccinations.

- **Resources for Learning**

  British Columbia Centre for Disease Control. Section IA - Introduction , Chapter 2 Immunization program. Communicable Disease Control Manual. http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm
  - 10.0 Vaccine Development and Licensing

  Public Health Agency of Canada (2006). Canadian immunization guide (7th ed.). http://www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cig-gci-2006_e.pdf
  - Part 2: Vaccine safety and adverse events following immunization
    - Vaccine evaluation and regulation
    - Vaccine safety surveillance and assessment in Canada

Module 4: Immunizing Agents

- **Competency:**

  Apply the knowledge of the components and properties of immunizing agents as needed for safe and effective practice.

- **Learning Objectives**

  1. Classify each immunizing agent used in practice as live attenuated or inactivated/subunit, and compare the major advantages and disadvantages of live versus inactivated /subunit vaccines.
  2. Identify key differences in the immune response to purified polysaccharide versus polysaccharide protein conjugate vaccines.
  3. Describe live attenuated, inactivated and subunit immunizing agents to an audience with minimal or no science knowledge.
  4. Describe, in general terms, the purpose, action and potential concerns of each of the following components that may be present in a given immunizing agent: adjuvant, preservative, additives
  5. Locate and utilize current information resources on the types and content of immunizing agents used in practice.
  6. Locate and utilize current information resources on addressing public concerns regarding immunizing agent components.

- **Introduction**

  Vaccines are highly regulated, complex biologic products designed to induce a protective immune response both effectively and safely. The components in the vaccines keep the vaccines safe and effective.

- **Resources for Learning**

  British Columbia Centre for Disease Control (2008). Immunization communication tool for immunizers. http://www.bccdc.ca/NR/rdonlyres/DADA3304-7590-48AC-8D2C-65D54ADFC77E/0/CDC_IC_Tool.pdf

  British Columbia Centre for Disease Control. Section IA - Introduction , Chapter 2 Immunization program. Communicable Disease Control Manual. http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm
  - 7.0 Definitions
  - 8.0 Immunogenic components of selected vaccines
  - 9.0 Non-immunogenic components of vaccines

  British Columbia Centre for Disease Control. Section VIII - Principles of Immunology , Chapter 2 Immunization program. Communicable Disease Control Manual. http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

British Columbia Ministry of Health. Childhood vaccines: what is in the vaccines and why. HealthLink BC Files on Childhood Immunization - #50d. HealthLink BC. http://www.healthlinkbc.ca/healthfiles/pdf/hfile50d.pdf

- #2. Do vaccines cause idiopathic illness such as autism?
- #3. The safety of vaccine components

Offit, P.A., & Jew, R.K. (2003). Addressing parents' concerns: do vaccines contain harmful preservatives, adjuvants, additives, or residuals? Pediatrics, Vol 112, No.6., pages 1394 - 1401. http://pediatrics.aappublications.org/cgi/reprint/112/6/1394

Public Health Agency of Canada (2006). Canadian Immunization guide (7th ed). http://www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cig-gci-2006_e.pdf

- General Guidelines: Table 1: Type and contents of vaccines currently approved for use in Canada

Module 5: Vaccine Immune Response

- **Competency:**

  Explain how vaccines work using basic knowledge of the immune system.

- **Learning Objectives**

  1. Differentiate between the primary and memory immune response to a vaccine.
  2. Explain why some vaccines induce a memory response while others do not.
  3. Name some host and vaccine-related factors that affect the immune response to vaccines.
  4. Respond to the concern that giving too many vaccines will overload the immune system.
  5. Discuss the pros and cons of immunity gained through immunization as opposed to wild type infection.
  6. Identify the key differences in the immune response to purified polysaccharide versus polysaccharide protein conjugate vaccines.

- **Introduction**

  Vaccines are highly regulated, complex biologic products designed to induce a protective immune response both effectively and safely. Vaccines interact with the immune system and produce an immune response similar to that produced by the natural infection, but they do not subject the recipient to the disease and its potential complications. Vaccines produce immunologic memory similar to that acquired by having the natural disease.

- **Resources for Learning**

  British Columbia Centre for Disease Control. Section VIII - Principles of Immunology , Chapter 2 Immunization program. Communicable Disease

Control Manual. http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

Module 6: Schedules

- **Competency:**

  Demonstrate an understanding of immunization schedules.

- **Learning Objectives**

  1. Describe the guidelines for immunization schedules.
  2. Name the B.C. resources that are used to guide immunization schedules and decision making
  3. Locate the current B.C. immunization schedules
  4. Explain how the guidelines for immunization schedules accommodates factors that affect the immune response to vaccines
  5. Illustrate in tabular format the vaccine, age, dose, route, site, contraindication, precaution, side effects for each vaccine.
  6. Describe the unique immunization needs of individuals who are off course for recommended immunizations.

- **Introduction**

  Following a standard immunization schedule ensures that the desired disease protection is achieved. Schedules may be modified for many different reasons such as: history of disease or previous immunization, risk factors, medical conditions, and age at presentation.

- **Resources for Learning**

  British Columbia Centre for Disease Control. Section IIA - Immunization Schedules, Chapter 2 Immunization program. Communicable Disease Control Manual. http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

  British Columbia Centre for Disease Control. Section VII - Biological Products, Chapter 2 Immunization program. Communicable Disease Control Manual. http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

  BC Adult Immunization Schedule http://www.bccdc.ca/imm-vac/ImmunizationSchedules/default.htm

  BC Child Immunization Schedule http://www.bccdc.ca/imm-vac/ImmunizationSchedules/default.htm

  BC School Age Immunization Schedule http://www.bccdc.ca/imm-vac/ImmunizationSchedules/default.htm

Module 7: Populations Requiring Special Considerations

- **Competency:**

  Recognize and responds to the unique immunization needs of certain population groups.

- **Learning Objectives**

  1. Describe the unique immunization needs of certain populations including:

  - Immunocompromised individuals
  - Pregnant and breastfeeding women
  - Occupational risk groups
  - Individuals new to Canada

  2. Appropriately refer to expert professional resources when required to address the immunization needs of certain populations.

- **Introduction**

  Vaccine schedules are adapted to meet the needs of specific populations

- **Resources for Learning**

  British Columbia Centre for Disease Control. Section IIA - Immunization Schedules, Chapter 2 Immunization program. Communicable Disease Control Manual http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

  British Columbia Centre for Disease Control. Section III - Immunization of Special Populations, Chapter 2 Immunization program. Communicable Disease Control Manual http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

  Public Health Agency of Canada (2006). Canadian Immunization Guide (7th ed.). http://www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cig-gci-2006_e.pdf
  - Part 3: Recommended Immunization, pages 105-135.

Module 8: Storage and Handling

- **Competency:**

  Implement provincial guidelines when storing, handling or transporting immunizing agents.

- **Learning Objectives**

  1. State where to access the most recent provincial guidelines dealing with immunizing agent storage, handling and transportation.
  2. Describe the provincial guideline requirements for immunizing agent storage, handling and transportation.
  3. Explain the importance of maintaining the cold chain.
  4. Outline the key steps for maintaining the cold chain in the practice setting.
  5. Explain actions taken to report and manage cold chain incidents that compromise immunizing agent integrity.

- **Introduction**

  Immunizing agents are biologic materials that are subject to gradual loss of potency over time. Loss of potency can be accelerated under certain conditions of storage, handling and transport. The effects of exposure to adverse environmental conditions, such as freezing, heat and light (MMR and Varicella vaccines), are cumulative. The loss of potency may result in failure to stimulate an adequate immunologic response, leading to lower levels of protection against disease.

- **Resources for Learning**

  British Columbia Centre for Disease Control Resources:
  http://www.bccdc.ca/imm-vac/ForHealthProfessionals/ColdChainInfo.htm
  - TempTale ® Monitoring Device
  - Vaccine Temperature Log
  - Packing an Insulated Cooler
  - What to do if the Temperature is Outside the 2°C to 8°C Range
  - Incident report: Vaccine Cold Chain Failure
  - Handle Vaccines with Care

  British Columbia Centre for Disease Control. Section VI - management of biologicals, Chapter 2 Immunization program. Communicable Disease Control Manual. http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

  Public Health Agency of Canada (2006). Canadian immunization guide.(7th. ed). http://www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cig-gci-2006_e.pdf
  - Part 1: General Guidelines, Storage and Handling of Immunizing Agents, page 45 - 50

  Public Health Agency of Canada (2007). National vaccine storage and handling guidelines for immunization providers.

http://atlantique.phac.gc.ca/publicat/2007/nvshglp-ldemv/pdf/nvshglp-ldemv-eng.pdf

- **Activities**

  Use the following check list to evaluate cold chain handling at your work site:
  - "Cold Chain Checklist" http://www.bccdc.ca/imm-vac/ForHealthProfessionals/ColdChainInfo.htm

Module 9: Administration

- **Competency:**

  Prepare and administers immunizing agents correctly.

- **Learning Objectives**

  1. Name the resources that are used to guide immunization administration process and decision making.
  2. Describe actions taken to increase safety in immunization clinics related to the provider, the recipient and the environment.
  3. Ensure the 7 "Rights" of immunization: right drug, right client, right dose, right time, right route, right reason and right documentation.
  4. Describe the steps involved in immunizing agent preparation, including reconstitution if appropriate, administration and disposal.
  5. Choose the correct needle length and gauge for the age and size of the client.
  6. Describe the age appropriate injection sites and proper client positioning used for immunization.
  7. Describe techniques to reduce the pain associated with immunization.

- **Introduction**

  Appropriate vaccine administration is a key element to ensuring the optimal safety and efficacy of vaccines.

- **Resources for Learning**

  British Columbia Centre for Disease Control. Section IIB - contraindications and precautions for immunization, Chapter 2 Immunization program . Communicable Disease Control Manual http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

  British Columbia Centre for Disease Control. Section IV - administration of biological products, Chapter 2 Immunization program. Communicable Disease Control Manual http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

  British Columbia Centre for Disease Control. Section VII - biological products, Chapter 2 Immunization program . Communicable Disease Control Manual http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

Public Health Agency of Canada (2006). Canadian immunization guide (7th. ed). http://www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cig-gci-2006_e.pdf

- Part 1: General Guidelines
  - Vaccine administration practices
  - Timing of vaccine administration

Schechter, N.L. et al. (2007).Pain reduction during pediatric immunizations: evidence-based review and recommendations (PDF). Pediatrics. 119;e1184 - e1198. http://pediatrics.aappublications.org/cgi/reprint/119/5/e1184

Module 10: Reactions

- **Competency:**

  Anticipate, identifies and manages reactions following immunization.

- **Learning Objectives**

  1. Use reliable evidence-based resources to list the frequencies of the common, uncommon and rare adverse events associated with immunizing agents.
  2. Inform recipients and/or their caregivers on what to expect and what to do regarding adverse events that could follow immunizations.
  3. Describe the step-by-step response to anaphylaxis as appropriate to the immunization setting.
  4. Locate appropriate forms and understand the process for submitting a report on an adverse event following immunization
  5. Distinguish between reporting an adverse event following immunization and proving that immunization caused an adverse event.

- **Introduction**

  Since immunizing agents are usually given to healthy people, any event that follows soon after immunization may be perceived as being due to the immunizing agent. Reactions do follow immunizations, but the temporal association is not proof that the event was caused by the immunizing agent.

- **Resources for Learning**

  British Columbia Centre for Disease Control. Section V - Management of Anaphylaxis in a Non-Hospital Setting, Chapter 2 Immunization program . Communicable Disease Control Manual http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

  British Columbia Centre for Disease Control. Section VII - Biological Products, Chapter 2 Immunization program. Communicable Disease Control Manual. http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

  British Columbia Centre for Disease Control. Section IX - Vaccine Associated Adverse Events , Chapter 2 Immunization program. Communicable Disease

Control Manual http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

British Columbia Centre for Disease Control. Section X - Appendices. Chapter 2 Immunization program. Communicable Disease Control Manual

Report of Adverse Event (Reaction) following Immunization (HLTH 2319) http://www.bccdc.ca/dis-cond/CDSurveillanceForms/default.htm

Module 11: Documentation

- **Competency:**

  Document information relevant to each immunization encounter in accordance with provincial guidelines for immunization practices and jurisdictional health information processes.

- **Learning Objectives**

  1. Describe the role and importance of immunization records.

  2. Identify the information to be documented on an immunization record

  3. Record the reason for and planned follow-up action when a scheduled immunization is not given.

- **Introduction**

  Immunization providers should maintain easily retrievable summaries o vaccination records to facilitate age-appropriate vaccinations.

- **Resources for Learning**

  College of Registered Nurses of British Columbia. Documentation- practice standard, publication 334. Retrieved June 29, 2008 from http://www.crnbc.ca/downloads/334.pdf

  College of Registered Nurses of British Columbia. Documentation, publication 151. Retrieved March 20, 2009 from http://www.crnbc.ca/downloads/151.pdf

  Public Health Agency of Canada (2006). Canadian immunization guide (7th ed.). http://www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cig-gci-2006_e.pdf
  - Part 1: General Guidelines: Immunization Records

Module 12: Legal & Ethical Issues

- **Competency:**

  Act in accordance with legal and high ethical standards.

- **Learning Objectives**

  1. Discuss the implications of the individual's right, confidentiality, privacy, informed consent and informed refusal.

  2. Describe the legislations that impact immunization practice in BC.

  3. Identify their professional scope of practice as it relates to immunization.

  4. Discuss the issues arising from mandatory versus voluntary immunization.

- **Introduction**

  Legal and ethical standards guide immunization practice. This module describes the legal requirements, scope of practice and ethical principles and issues pertaining to immunization.

- **Resources for Learning**

  British Columbia Centre for Disease Control. Section IB - Informed Consent , Chapter 2 Immunization program. Communicable Disease Control Manual. http://www.bccdc.ca/dis-cond/comm-manual/CDManualChap2.htm

  BC Freedom of Information and Protection of Privacy Act: http://www.bclaws.ca/Recon/document/freeside/--%20F%20--/Freedom%20of%20Information%20and%20Protection%20of%20Privacy%20Act%20%20RSBC%201996%20%20c.%20165/00_Act/96165_01.xml

  BC Infant Act: http://www.bclaws.ca/Recon/document/freeside/--%20I%20--/Infants%20Act%20%20RSBC%201996%20%20c.%20223/00_96223_01.xml

  BC Health Professions Act: http://www.bclaws.ca/Recon/document/freeside/--%20H%20--/Health%20Professions%20Act%20%20RSBC%201996%20%20c.%20183/00_96183_01.xml

  BC Public Health Act: http://www.leg.bc.ca/38th4th/3rd_read/gov23-3.htm

Module 13: Population Health

- **Competency:**

  Apply relevant principles of population health for improving immunization rates.

- **Learning Objectives**

  1. Use specific examples to show how immunization is a population-based health strategy.
  2. Explain the concept of herd immunity (also called community immunity) in non scientific terms.
  3. Explain, using examples, why vaccine-preventable diseases return when immunization coverage decreases.
  4. Explain how immunization registries can benefit not only individuals but also populations.
  5. Present the case for the importance of having a highly immunized healthcare work force.
  6. Identify barriers (economic, educational and social factors) to immunization uptake.

- **Introduction**

  Vaccines not only prevent disease in an individual but also prevent disease in the population. The epidemiology triangle is used to understand herd immunity and the importance of immunization rates in population health.

- **Resources for Learning**

  British Columbia Center for Disease Control. (2009). Immunization & Vaccines: Immunization Coverage. Retrieved June 29, 2009 from http://www.bccdc.ca/imm-vac/BCImmunizationCov/default.htm

  British Columbia Ministry of Health. *Immunization for health care providers #66*. HealthLink BC Files on Childhood Immunization - #66. HealthLink BC. http://www.healthlinkbc.ca/healthfiles/pdf/hfile66.pdf

  Public Health Agency of Canada (2006). Canadian Immunization guide (7th ed). http://www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cig-gci-2006_e.pdf

  - General Guidelines
    - Part 3 - Recommended Immunizations - Immunization of Adults (pages 96 - 104)

  United Kingdom, NHS Herd Immunity. http://www.immunisation.nhs.uk/About_Immunisation/Science/Herd_immunity_-_animation

Module 14: Communication: Part 1 - Principles

- **Competency:**

  Communicate effectively about immunizations.

- **Learning Objectives**

  1. Explain the importance of risk perception for immunization decision making.
  2. Respond appropriately following an assessment of client knowledge, attitudes, and beliefs regarding immunization.
  3. Deliver clear, concise messages about the risks of vaccine-preventable diseases and the benefits/risks of vaccines.
  4. Provide guidance to clients so they can correctly identify credible sources of information on immunization and vaccines.

- **Introduction**

  Public concern regarding vaccine safety can reduce vaccine coverage and result in resurgence of vaccine-preventable diseases. As trusted information sources, health care providers have a vital role in the continued success of immunization programs. Providers must have skill and expertise, not only in the principles and practices of immunization but also in effective communications techniques.

- **Resources for Learning**

  Canadian Pediatrics Society, Caring for Kids "A Parent's Guide to Health Information on the Internet"
  http://www.cps.ca/caringforkids/healthybodies/InternetInfo.htm

  Gerber, J.S. & Offit, P.A. (2009). Vaccines and autism: A tale of shifting hypotheses. Clinical Infectious Diseases, 48, February 15, pages 456 - 461.
  http://www.journals.uchicago.edu/doi/pdf/10.1086/596476

  Gold, R. (2006). Your child's best shot. Canadian Pediatric Society, Ottawa.
  - Chapter 21: Resources, pages 347 - 354

    This book may be available at your local library or Public Health office. You can order from the Canadian Pediatric Society Bookstore:
    http://www.cps.ca/english/publications/Bookstore/YourChildsBestShot.htm

  Public Health Agency of Canada (2006). Canadian immunization guide (7th ed.).
  http://www.phac-aspc.gc.ca/publicat/cig-gci/pdf/cig-gci-2006_e.pdf
  - Part 1: General Guidelines

    - Communicating Effectively about Immunization, pages 29 - 32

Module 15: Communication: Part 2- Immunization Issues

- **Competency:**

  Address immunization issues using an evidence-based approach.

- **Learning Objectives**

  1. Address misperceptions regarding immunizing agents using evidence based approach.
  2. Locate evidenced based sources of information on current issues relating to immunization.
  3. Use scientific knowledge to develop clear, concise key messages regarding true immunization benefits and risks.

- **Introduction**

  Using the communication techniques and the content from previous modules, this module looks at specific immunization questions and answers them using an evidence-based approach.

  The Immunization Communication Tool addresses many the common questions people will ask you as an immunization provider. It provides scientific references and examples of clear communication to parents.

- **Resources for Learning**

  British Columbia Centre for Disease Control (2008). Immunization communication tool for immunizers. http://www.bccdc.ca/NR/rdonlyres/DADA3304-7590-48AC-8D2C-65D54ADFC77E/0/CDC_IC_Tool.pdf

  British Columbia Ministry of Health. *Your baby's immune system and vaccines*. HealthLink BC Files on Childhood Immunization - #50a. HealthLinkBC http://www.healthlinkbc.ca/healthfiles/pdf/hfile50a.pdf

  British Columbia Ministry of Health. *The benefits of vaccinating your child*. HealthLink BC Files on Childhood Immunization - #50b. HealthLinkBC http://www.healthlinkbc.ca/healthfiles/pdf/hfile50b.pdf

  British Columbia Ministry of Health. *Childhood vaccines are safe.* HealthLink BC Files on Childhood Immunization - #50c. HealthLinkBC http://www.healthlinkbc.ca/healthfiles/pdf/hfile50c.pdf

  British Columbia Ministry of Health. *Childhood vaccines: What is in the vaccines and why*. HealthLink BC Files on Childhood Immunization - #50d. HealthLinkBC http://www.healthlinkbc.ca/healthfiles/pdf/hfile50d.pdf

  CDC (Centers for Disease Control and Prevention, USA) website and information: "Why Immunize? For parents". http://www.cdc.gov/vaccines/vac-gen/why.htm

CDC (Centers for Disease Control and Prevention, USA) website and information: “What would happen if we stopped vaccinations” http://www.cdc.gov/vaccines/vac-gen/whatifstop.htm#intro

Fombonne, E et al (2006). Pervasive Developmental Disorders in Montreal, Quebec, Canada: Prevalance and links with immunizations. Pediatrics. Vol 118, pages e139 - e150. http://pediatrics.aappublications.org/cgi/reprint/118/1/e139

Gerber, J.S. & Offit, P.A. (2009). Vaccines and autism: A tale of shifting hypotheses. Clinical Infectious Diseases, 48, February 15, pages 456 - 461. http://www.journals.uchicago.edu/doi/pdf/10.1086/596476

Immunize Action Coalition (2007). MMR vaccine does not cause autism: Examine the evidence. Reviewed by U.S. Centers of Disease Control and Prevention, August 2007. Retrieved July 2009. http://www.needletips.org/catg.d/p4026.pdf

Offit, P.A., & Jew, R.K. (2003). Addressing parents' concerns: do vaccines contain harmful preservatives, adjuvants, additives, or residuals? Pediatrics, Vol 112, No.6., pages 1394 - 1401. http://pediatrics.aappublications.org/cgi/reprint/112/6/1394

Offit, P.A. Quarles et al (2002). Addressing Parents’ concerns: do Multiple vaccines overwhelm or weaken the infant’s immune system? Paediatrics. Vol 109, pages 124 - 129). http://pediatrics.aappublications.org/cgi/reprint/109/1/124

Vaccine Concerns: Reprint Permission of PDF of Chapter 15 .Common Concerns about Vaccines,. p. 92-115, from the book Vaccines: What You Should Know, third edition, by Paul A. Offit, MD, and Louis M. Bell, MD, ©2003. http://www.immunize.org/catg.d/p4038.pdf

Module 16: Canadian Immunization System

- **Competency**:
  Demonstrate an understanding of the immunization system in Canada and its impact on practice.

- **Learning Objectives**

  1. Describe how the National Immunization Strategy (NIS) is relevant to practice
  2. Distinguish between federal and provincial/territorial responsibilities as related to immunization programs in Canada.
  3. Explain the reasons for the variable immunization schedules among the provinces and territories.
  4. List who can administer immunizations in British Columbia.

- **Introduction**

  In Canada, immunization is a shared responsibility between federal, provincial and territorial governments. National, provincial, and territorial immunization strategic frameworks guide current and future immunization practices.

- **Resources for Learning**

  ImmunizeBC website: http://www.immunizebc.ca

  Ministry of Health (2007). *Immunize BC: a strategic framework for immunization in B.C.*
  http://www.health.gov.bc.ca/library/publications/year/2007/immunizebc.pdf

  Minister of Health (2004). *National Immunization Strategy: Final report 2003.*
  http://www.phac-aspc.gc.ca/publicat/nis-sni-03/pdf/nat_imm_strat_e.pdf

  Public Health Agency of Canada. *National Advisory Committee on Immunizations.* retrieved November 2, 2009 from http://www.phac-aspc.gc.ca/naci-ccni/

  Public Health Agency of Canada. *Publicly funded Immunization Programs in Canada*, retrieved November 2, 2009 from: http://www.phac-aspc.gc.ca/im/ptimprog-progimpt/table-1-eng.php

3. SKILLS ASSESSMENT

The candidate will provide immunization and will be evaluated by a nursing supervisor or designate using the Immunization Skills Checklist. The evaluator will complete a separate Immunization Skills Checklist for each candidate/client encounter.

IMMUNIZATION SKILLS CHECKLIST

Name: _____ **Registration No**.: _____

ACTIVITY	DATE
CLINIC SETUP	
❑ Ensures anaphylaxis kit is complete and accessible	
❑ Sets up supplies and equipment to promote proper body mechanics and OHS standards	
❑ Follows provincial guidelines when storing, handling or transporting vaccines	
PERFORMS APPROPRIATE CLIENT ASSESSMENT PRIOR TO IMMUNIZATION	
❑ Health status	
❑ Contraindications and adverse event history	
❑ Vaccine history from client/agency record	
❑ Determines high risk eligibility for additional vaccines (e.g. influenza)	
❑ Recognizes and responds to the unique immunization needs of certain population groups	
VACCINE(S) TO BE ADMINISTERED	
❑ Determines vaccine(s) to be administered according to guidelines of the BCCDC Immunization Program	
OBTAINS INFORMED CONSENT	
❑ Discusses the implications of the individual's rights, confidentiality, privacy, informed consent and informed refusal	
❑ Explains that consent is obtained for a vaccine series and consent is valid until completion of the series	
❑ Refers to appropriate HealthLink File(s) and identifies credible sources of immunization information	
❑ Using scientific knowledge, delivers clear, concise messages about the risks of vaccine-preventable diseases and the benefits of vaccines	
❑ Describes the nature and purpose of the vaccine(s)	
❑ Describes the common and expected reactions following immunization	
❑ Reviews possible serious or severe adverse events and their frequency	
❑ Reviews contraindications and precautions related to vaccine(s) to be administered	
❑ Provides aftercare instructions	
❑ Ensures client has opportunity to ask questions	

PREPARES VACCINE CORRECTLY	**DATE**
❑ Cleanses hands	
❑ Maintains sterile and aseptic technique	
❑ Selects correct vaccine, checks vaccine, expiry date, and dosage X 3 prior to administration	
❑ Reconstitutes vaccine	
❑ Chooses the correct needle length and gauge for the age and size of the client	
DEMONSTRATES CORRECT VACCINE ADMINISTRATION	
❑ Instructs proper positioning either by showing parent to position and hold child appropriately or by instructing adult to sit and relax site of injection	
Demonstrates accurate injection technique and site location	
□ Intramuscular	
□ Subcutaneous	
□ Intradermal	
❑ Safely handles and disposes of syringe	
❑ Assists parent to comfort child as needed	
❑ Demonstrates appropriate knowledge of protocol for the management of anaphylaxis, and describes emergency plan to manage anaphylactic event or a fainting episode	
DOCUMENTATION	
❑ Documents consent or refusal for immunization	
❑ Documents contraindications	
❑ Records an immunization encounter on the appropriate documentation instruments accurately and completely.	
❑ Records the reason for and planned follow-up action when a scheduled immunization is not given	
❑ Reports adverse events in the electronic registry OR submits adverse events via HLTH 2319 form to the appropriate agency	
❑ Provides immunization record to client	
CLIENT REMINDERS	
❑ Explains when next vaccines are due	
❑ Reminds client to report possible serious or adverse events	

Immunization Evaluator(s): _____ (NAME) _____ (SIGNATURE) _____ (DATE)

_____ (NAME) _____ (SIGNATURE) _____ (DATE)