

Quality Immunization Programs

Published December 2020

Immunizations in Alberta can be provided through a variety of settings, including public health clinics, physician offices, health-care institutions, community settings and private agencies. While most publicly funded immunization programs are through public health agencies, some non-publicly funded immunization services may also be provided by private health-care agencies. The safety and quality of these services rest with the health professional providing the immunization program oversight and the nurse¹ or other health professional who administers the vaccine.

Quality components of immunization programs

In public health settings, a client specific order for a Schedule 1 vaccine is not required as the Medical Officer of Health provides authority to nurses to administer Schedule 1 and 2 vaccines as part of a provincial immunization program. In other settings, Schedule 1 vaccines require a client specific order from an authorized prescriber before a nurse can administer the vaccine. Schedule 2 vaccines, such as the influenza vaccine, do not require a client specific order. However, practice settings should have quality immunization programs in place to support nurses administering vaccines.

Immunization is more than performing the psychomotor task of giving an injection, and involves additional knowledge, skill, and competence to properly administer a vaccine. Safe immunization requires

- knowledge, skill, and judgment to assess the appropriateness of administering the vaccine to an individual client;
- sharing with the client the risks and benefits of receiving immunization versus not receiving the vaccine;
- careful client assessment for anaphylaxis risk, such as previous anaphylaxis, severe allergy to any component of the vaccine or to latex;
- compliance with the recommended dose, route, site, and schedule for administering the vaccine;
- vaccine handling and storage according to the vaccine manufacturer's package monograph and employer policy;

¹ Nurse refers to registrants of CRNA, including registered nurses (RN), graduate nurses (GN), nurse practitioners (NP), graduate nurse practitioners (GNP), and certified graduate nurses (CGN), and those on the courtesy register.

- knowledge of the vaccine action, interaction, minor side-effects, and potential adverse events;
- monitoring the client during and following vaccine administration; and
- managing side-effects or adverse effects of the vaccine.

Components of a high-quality immunization program include program policies, practice standards and vaccine management, documentation, reporting, education and promotion, and occupational health and safety. These components are intended to guide

- the development of a comprehensive immunization program in either the public or private sector in Alberta; and
- the practice of nurses who provide immunization services.

Strategies to address each component include the following:

- Program policies
 - All providers of immunizations should participate in local and provincial initiatives that evaluate immunization programs.
 - All providers of immunizations are required to report immunizations and related assessments electronically to Alberta Health.
 - Procedures on how to assess and report all vaccine-related adverse events must be in place, as per the Alberta Health(2019) Adverse Events Following Immunization (AEFI) policy for Alberta immunization providers:
 - Serious events include those that are considered life-threatening or result in hospitalization; prolongation of an existing hospitalization, permanent disability, congenital abnormality; or fatal outcome.
 - Unexpected events are those not included in the product monograph.
 - Any health practitioner who becomes aware of an adverse event following immunization (AEFI) must report it. They do not have to be the one who administered the vaccine.
 - Nurses refer or have the expertise to advise clients on unexpected reactions or adverse events post-immunization.
 - Procedures must be in place for tracking, reporting, and managing immunization errors.
- Practice standards
 - Nurses who participate in an immunization program use appropriate information and resources that enhance client care and the achievement of desired client outcomes. They must have access to an information manual or other employer supports that address topics such as
 - risks and benefits of receiving the vaccine,
 - contraindications,
 - procedures for anaphylaxis,
 - volume of vaccine permitted in specific anatomical sites,

- appropriate dosage,
 - procedure for multiple injections,
 - informed consent,
 - assessment when the vaccine schedule has been interrupted,
 - safe disposal of sharps, and
 - infection prevention practices.
 - Nurses who immunize must practice competently and should be provided with orientation.
 - Nurses must also regularly assess their practice and take the necessary steps to improve personal competence.
- Vaccine management
 - Appropriate storage, handling and transporting of vaccines must be ensured, as per the Alberta Health (2019) Alberta vaccine storage and handling policy for provincially funded vaccine:
 - Vaccines are sensitive biological products that may become less effective or destroyed when exposed to less-than-optimal conditions.
 - Vaccines should be stored at temperatures that are required. Some vaccines require protection from light.
 - Cold chain requirements apply to any vaccine storage and handling, regardless of whether provincially funded or privately purchased.
 - Nurses participating in immunization programs should be involved with the selection and evaluation of vaccine products to facilitate safe and efficient immunization in the field.
 - Methods to effectively manage vaccine inventory and monitor vaccine expiry dates must be established.
 - Vaccine utilization must be tracked on an ongoing basis.
- Documentation
 - Documentation must be in accordance with the Public Health Agency of Canada (PHAC) Canadian Immunization Guide.
 - Nurses should record the immunization in the client's personal immunization record and in the health-care record.
 - Immunization records should include the following:
 - brand name of the administered product
 - time and date of administration
 - quantity of administered dose (if applicable)
 - anatomical site of administration
 - route of administration
 - lot number of the product
 - name and professional designation of the persona administering the product
 - Additional information in the client's health-care record should include:
 - all relevant serology data (rubella or hepatitis B serology),

- documentation of any AEFI,
- contraindications to the vaccine or reasons for withholding immunization, and/or
- other immunization related documentation as per employer requirements.
- Reporting
 - All immunization events must be reported electronically to Alberta Health's Chief Medical Officer (CMO) as per the Alberta Health (2020) Immunization data submission and response guidelines. Immunization events include:
 - an assessment with the intention of immunizing where consent for immunization is not received or immunization is contraindicated,
 - the administration of the vaccine,
 - a past unreported immunization, and/or
 - any AEFI.
- Education and Promotion
 - Promotion of immunization through public education by all nurses, including those who provide immunizations.
 - Teach nursing students about immunizations and encourage student participation in the practice setting.
- Occupational Health and Safety
 - Development of prevention plans to reduce sharps related injuries.
 - Development of management plans for exposure to sharps and sharp related incidents.
 - Document all management of staff post-exposure procedures regarding sharps related injuries.

The Public Health Agency of Canada (2008) has outlined *Immunization Competencies for Health Professionals* needed by health-care professionals to administer immunizations in Canada.

For further information on registered nurse (RN) responsibilities and accountability with immunization, see CRNA's *Flu Immunization - RN Responsibilities (2021)*.