OVERVIEW

Vaccine use has significantly contributed to the prevention and control of infectious diseases in Canada and internationally (Canadian Immunization Guide (CIG), 2017). Nurses in acute and long term care are in an optimal position to offer timely immunization, through vaccination with a client specific prescriber order. Immunizations in these settings are intended to ensure those eligible are offered immunization to maintain optimum health and best practice immunization schedules.

DEFINITIONS

**Anaphylaxis:** A potentially fatal allergic reaction that could occur following administration of a vaccine. It involves at least two body systems (e.g. the skin, respiratory, gastrointestinal and/or circulatory systems). Anaphylaxis is rare with an estimated range of occurrence of 1-10 episodes per million doses of vaccine administered; however, it should be anticipated in every client. As a medical emergency, quick recognition and treatment can be life-saving (CIG, 2017).

**Client:** A term used to describe a client, patient or resident.

**Cold Chain:** The process used to maintain optimal conditions during storage, transport or handling of vaccines from manufacture to administration. Ensuring the cold chain is maintained is imperative as vaccines are sensitive biological products that may be less effective or ineffective when exposed to temperatures outside the recommended range.

**Eligibility:** Refers to appropriateness and qualification for a publicly funded vaccine.

**Established Plan of Care:** Based on a Registered Nurse (RN) assessment of care needs, the plan of care for immunization with prescriber order may be considered established with well-known clients or patients no longer requiring acute care treatment such as new mothers at discharge or well-known Alternate Level of Care (ALC) patients in acute care awaiting Long Term Care placement.
Immunization: An inclusive term denoting the process of providing immunity artificially by administering an immunological product; immunization may be passive or active (Saskatchewan Immunization Manual (SIM)).

Nurse: Refers to licensed nurses: Licensed Practical Nurses (LPN), Registered Nurses (RN), and Registered Psychiatric Nurses (RPN).

Prescriber: Refers to the Physician Practitioner or RN (Nurse Practitioner), (RN(NP)) who orders the immunization.

Targeting: The process beginning with the clinical manager’s decision based on client care needs, to identify and request approval for new Licensed Practical Nurse Additional Competencies (LPNAC) for the practice area. Approval of targeting is the responsibility of SHR Nursing Practice Committee. Once approved, targeted area will be added to Appendix D Licensed Practical Nurse Additional Competencies Policy #1071.

Vaccine: A preparation of live (usually attenuated or treated) or inactivated microorganisms or fractions thereof administered to induce immunity (SIM).

Vaccination: A method of preventing certain infections. It consists of introducing preparations called vaccines into an organism for the purpose of inducing active immunity (SIM).

ROLES

Licensed Practical Nurse (LPNs): LPNs identified by their manager in targeted practice settings will be certified in the LPN Additional Competency: Immunization with Prescriber Order and an Established Plan of Care. The LPN will provide immunization autonomously, as assigned, for clients who are greater than five years of age and are less complex, more predictable and at lower risk for negative outcomes (SALPN, 2018). If a change is required in the client’s plan of care, the LPN will consult with a RN, RN Immunizer in Population and Public Health, RN (NP) or Physician and work collaboratively to establish a new plan of care.

In practice settings which are not targeted for this competency, and until June 2019, LPNs currently educated or certified may continue to provide immunization, as assigned, but LPNs requiring initial certification will not be certified until targeting is approved for the practice setting.

Note: Graduate Licensed Practical Nurses (GLPNs) who have completed the appropriate employer education may perform LPN Additional Competencies only with the direct supervision of an RN, RPN or LPN who is certified in the LPN Additional Competency, Immunization with prescriber order and an established plan of care (SHR Nursing Policy 1071).

Note: In order to ensure the safety of the client, Practical Nursing students may not perform Additional Competencies (SHR Nursing Policy 1071).

Registered Nurses (RNs): If a change is required to a plan of care within an LPN’s assignment, an RN will provide consultation as needed and work collaboratively with the LPN until a new plan of care is established. At any time, if care needs are beyond the individual competence of a RN providing immunization, they will consult and work collaboratively with another RN, RN Immunizer in Population and Public Health, RN(NP) or physician prior to providing immunization.
Registered Psychiatric Nurses (RPNs): RPN certification for this Specialty Practice is under review, by the SHR Nursing Practice Committee. As assigned, currently certified or educated RPNs may continue to provide immunization. RPNs requiring initial certification will not be certified until the review is completed.

1. PURPOSE

1.1 To reduce morbidity and mortality associated with vaccine-preventable diseases by immunizing clients with prescribed vaccines.

1.2 To safely manage the risks associated with immunization, such as anaphylaxis.

1.3 To ensure appropriate management of the cold chain to protect the potency and minimize wastage of vaccine.

2. POLICY

2.1 Each Vaccine requires a prescriber order.

2.2 Adverse events following immunization (AEFI) are any untoward medical occurrence in a client which follows immunization. Immunizers should anticipate, identify and manage AEFIs, as appropriate to their practice setting. AEFIs that meet reporting criteria as set out in the Saskatchewan Immunization Manual (SIM), must be reported to SHR Population Public Health using the following form: http://www.phac-aspc.gc.ca/im/aefi-essi-form-eng.php

Note: Minor or expected reactions, as described in the SIM, do not need to be reported.

2.3 All vaccines will come from Public Health or a unit or pharmacy that is able to maintain the cold chain and manage vaccines.

2.4 Targeting for clinical areas and the certification of individual nurses will be vaccine specific.

2.5 The Certified LPN will have completed the following:

2.5.1 An educational session on immunization and anaphylaxis, with vaccine specific information and information on nursing roles

2.5.2 An appropriate learning package and quiz

2.5.3 A skills check list or simulation with a RN (RN or LPN) or Certified LPN during the first immunization to insure safety checks (the procedure) are followed appropriately

2.5.4 Repeat quiz annually for each vaccine to maintain certification

2.6 Education required for each practice area targeted will include:

2.6.1 Theory, risks and benefits of vaccination and vaccine preventable diseases

2.6.2 Populations at risk of complications from not receiving vaccine, as per specific vaccine (e.g. Residents in Long Term Care for pneumococcal, mothers of newborns for pertussis).

2.6.3 Indication for and precautions or contraindications to receiving vaccine
2.6.4 Informed consent

2.6.5 Vaccine preparation

2.6.6 Vaccine administration
   2.6.6.1 Multiple injections
   2.6.6.2 Volume of vaccine permitted in specific anatomical sites

2.6.7 Storage, cold chain, transportation and disposal of vaccines

2.6.8 Potential AEFIs, including anaphylaxis, identification, how to manage and when to report

2.6.9 Documentation guidelines

3. PROCEDURE

3.1 Supplies

   3.1.2 Vaccine and administration equipment

   3.1.3 Anaphylaxis kit or supplies must be accessible

   3.1.4 Alcohol swabs

   3.1.5 Hand sanitizer

   3.1.6 Clean gloves

3.2 Procedure
   3.2.1 Verify prescriber order. In the absence of a medical directive, the order must include direction for the management of anaphylaxis.

      3.2.1.1 Verify anaphylaxis supplies or kit are available and readily accessible

   3.2.2 Determine the client’s eligibility for publicly funded vaccine by checking e-viewer. Exception: Tetanus

      Note: If you do not have access to e-viewer, call the Immunization Record Search Line accessible Monday to Friday, 08:00-16:30 at 306-655-4090. If outside of these hours, refer to Public Health.

   3.2.3 Assess client and review vaccine specific screening criteria for potential precautions or contraindications to the vaccine.
**Note:** If client shows signs of illness, has a current active infection – acute febrile or viral illness, **DO NOT ADMINISTER** until a prescriber is consulted.

**Note:** If a client has a life-threatening allergy to any components of the vaccine **DO NOT ADMINISTER** and refer them to Population and Public Health.

3.2.4 Provide client with vaccine specific information sheet and review the following:

3.2.4.1 Name of immunizing agent

3.2.4.2 Disease being prevented

3.2.4.3 Benefits of the vaccine

3.2.4.4 Risks of not getting the vaccine

3.2.4.5 Common and expected side effects

3.2.4.6 Possible serious, severe or unusual adverse events

3.2.4.7 Contraindications

3.2.4.8 Explain importance for observing post immunization for 15 -30 minutes.

3.2.4.9 Contact information for follow up, if applicable (e.g. discharge home following immunization)

3.2.5 Obtain verbal consent from client or guardian to proceed with immunization.

3.2.6 Obtain the immunizing agent just prior to immunization to maintain cold chain.

3.2.7 Consider age appropriate pain management strategies and obtain prescriber order, as required, prior to vaccine administration (e.g. topical lidocaine, 24% Sucrose, positions of comfort).

3.2.8 Perform hand hygiene.

3.2.9 Prepare vaccine: examine the vaccine appearance for color, irregularities and/or particulates (e.g. signs of freezing).

3.2.10 Perform hand hygiene. Wipe site of administration with alcohol swab. Perform hand hygiene and don clean gloves.

3.2.11 Administer as indicated per specific vaccine.

3.2.12 Remove gloves and perform hand hygiene.

3.2.13 Provide client with immunization agent name and date for their record by documenting it in the discharge instructions or providing a card.
3.2.14 Observe the client for signs of an adverse reaction for a period of 15-30 minutes. If the client experiences a severe adverse reaction (anaphylaxis), initiate emergency treatment as ordered. Notify the prescriber of the event. The client may require transport for higher level of care.


3.2.14.2 Report adverse event to safety report line or Adverse Event Management System (AEMS).

3.3 Documentation on the client record will include:

3.3.1 Informed consent

3.3.2 Manufacturer, agent trade name and agent standard abbreviation

3.3.3 Lot number and expiry date

3.3.4 Date and time given

3.3.5 Anatomical site

3.3.6 Dosage given

3.3.7 Route of administration

3.3.8 Name and title of person administering the agent

3.3.9 Any reactions following immunization (e.g. fainting, adverse event)

3.3.10 Document on the client record and discharge instruction sheet (for their record) if applicable.

3.4 For entry into the appropriate data base:

3.4.1 Return vaccine administration form sent with the vaccine as indicated on the bottom of the form.

3.4.2 Or provide information required as pre-arranged with Population and Public Health.
4. REFERENCES


Saskatchewan Immunization Manual. (2013). Retrieved May 3, 2017 from: [https://www.ehealthsask.ca/services/Manuals/Pages/SIM.aspx](https://www.ehealthsask.ca/services/Manuals/Pages/SIM.aspx)