

Guidance for Influenza Vaccine Delivery in the Presence of COVID-19 (October, 2020)

Preamble

The purpose of this document is to provide guidance for the delivery of seasonal influenza vaccine in fall 2020, when ongoing COVID-19 activity may continue to stress public health capacity and affect clinic operations and attendance. This guidance was originally developed by the Public Health Agency of Canada (PHAC), in consultation with the Canadian Immunization Committee and the National Advisory Committee on Immunization (NACI), and has been adapted by the British Columbia Centre for Disease Control (BCCDC) to be applicable to the BC context.

Reducing the burden of influenza is particularly important this fall and winter to prevent an increase in health care utilization at the same time as there is a potential resurgence of COVID-19 activity. In its [seasonal influenza vaccine statement](#) for 2020-2021, NACI advises that priority should be given to providing influenza vaccine to persons at high risk of influenza complications and those capable of transmitting infection to them.

The seasonal influenza immunization campaign provides an opportunity to develop and practice approaches that may be used for the anticipated COVID-19 immunization program and to ensure consideration of the diverse needs of population groups based on access to services, vulnerability, ethnicity/culture, ability status and other socioeconomic and demographic factors. These approaches may also be useful for the provision and catch-up of routine immunization. Additional advice for the provision of routine immunization programs during the COVID-19 pandemic is available from the [Continuity of Immunization Services During COVID-19](#).

Challenges posed by COVID-19

The COVID-19 pandemic creates a series of challenges for the delivery of the seasonal influenza immunization program, including:

- Need for measures to avoid transmission of COVID-19 to staff, volunteers and clients (many of whom are at increased risk of severe disease from both influenza and COVID-19);
- Availability of personnel to provide immunizations, as staff may be deployed to COVID-19 work and cautions apply to the involvement of staff or volunteers who are considered to be at [high risk for severe illness from COVID-19](#);
- Access to sufficient supplies of PPE for immunizers and other staff;
- Access to or suitability of usual venues for immunization administration;
- Risk of a resurgence of COVID-19 activity concurrently with scheduled influenza immunization delivery;
- Public fear of exposure to COVID-19 while accessing immunization services; and
- Potentially increased demand for influenza vaccine starting early in the campaign, as seen in the Southern hemisphere.

Recommendations for influenza immunization programs

Consider alternate models of influenza vaccine delivery this fall

Health authorities across the province use varying systems for their seasonal influenza program, and local factors also play an important role in the planning and delivery of influenza vaccine. This fall, jurisdictions should consider a wide range of strategies to deliver influenza vaccine, with the goal of reducing crowding while maintaining or increasing vaccine uptake. Alternate models include the use of non-traditional settings such as outdoor venues and outreach clinics.

Approaches to be considered include:

- Hold multiple smaller public clinics instead of large clinics with many attendees;
- Schedule extended clinic hours to avoid crowding;
- Provide immunization opportunistically to patients and their companions when they are discharged from hospital or are seen for other reasons (e.g., at primary care offices, outpatient clinics or pharmacies);
- In primary care settings, designate specific times for immunization clinics to ensure that only well persons are in the area at the time, e.g., at the start or end of the day;
- Cooperate with other clinics / medical practices to operate a joint influenza vaccine clinic in a dedicated space with dedicated staff;
- Provide influenza vaccine during senior shopping hours at pharmacies in grocery stores, or create special hours for seniors and other vulnerable persons at pharmacies and other venues;
- Administer vaccines outdoors (weather permitting) – e.g., in a provider’s parking lot or a drive-through clinic;
- Establish mobile clinics in vans or buses to visit neighbourhoods;
- Develop an outreach strategy to administer influenza vaccine to vulnerable persons, housebound persons, and seniors who are sheltering in place;
- Provide immunization during home care visits;
- Administer influenza vaccine at congregate living centres, e.g., retirement homes, group homes, homeless shelters, student residences and in correctional facilities;
- Have health care organizations, including long-term care facilities provide their own immunization for staff, volunteers and patients/clients (usual practice); and
- Encourage workplaces to organize their own on-site immunization programs.

Adaptations to usual immunization procedures

The text box below highlights the types of adaptations to usual immunization practices that are recommended in the presence of COVID-19 activity. The sections that follow provide additional details.

Adaptations to usual immunization procedures

- ✓ Advance communication to clients about clinic adaptations to ensure their safety
- ✓ Screening for illness/exposure to COVID-19 – staff, volunteers and clients
- ✓ Physical distancing – may affect the physical layout and number of clients that can be accommodated at any given time
- ✓ Infection prevention and control (IPC) requirements, including the need for personal protective equipment (PPE)
- ✓ Increased environmental cleaning
- ✓ Potential need for longer hours and increased staff
- ✓ Use of appointment systems to reduce clinic crowding
- ✓ Use of technology and other methods to reduce contact (e.g., on-line registration, paperless registration, consent and recording processes)
- ✓ Visible and audible communications explaining COVID-19 adaptations to influenza immunization campaigns in accessible formats

Advance communication

Inform clients about measures you are taking to ensure their safety while attending the clinic. This can be done through voice recordings or phone calls, advance email or text messaging, and your web site.

Inform clients that they should postpone their visit if they have symptoms of COVID-19.

Screening and entry – all venues

All persons attending the venue should be passively screened (through signage) and actively screened before entry, even if they were already pre-screened by telephone when the appointment was made. Staff and volunteers should be screened before each shift. There are various options for active screening, for example:

- Provide or link to an online screening tool (e.g., [BC COVID-19 Self-Assessment Tool](#)) to be used the day of immunization;
- Screen clients by telephone on arrival before they enter the building (e.g., while still in their car); and
- Screen arrivals in person, preferably before entering the building.

Signage at the door should advise visitors not to enter if they are ill, use the hand sanitizer provided on entry, practice respiratory etiquette, and maintain physical distancing. A [non-medical mask or face covering](#) may be recommended. If required, masks should be available for those who come without, preferably at no cost to the client.

If any persons are identified with symptoms on arrival at the venue, they should be instructed to perform hand hygiene, put on a medical mask and be redirected for assessment (e.g., to a health care provider or [COVID-19 assessment site](#) depending on their symptoms).

Physical distancing

A two-metre physical distance should be maintained as much as possible, using strategies such as:

- Schedule/appointments to avoid crowds;
- Ask people to arrive at their assigned time;
- Have people wait in cars and calling them in when ready (by phone or text);
- Use signage, barriers or floor markings for persons who are waiting;
- Space chairs in waiting areas two metres apart. Allot increased space for people using wheelchairs, walkers or strollers and for families and companions; and
- Monitor entries and exits, waiting areas and lineups to maintain physical distancing.

Infection prevention and control (IPC)

IPC measures are needed to prevent transmission of COVID-19 in the immunization setting. These include:

- Require ill staff and volunteers to stay at home;
- Screen clients for symptoms and do not proceed if they are ill;
- Implement engineering controls if feasible, e.g., install clear plastic barriers at reception areas and between immunization stations in community clinics;
- Implement administrative controls to maintain physical distancing (as described in the Physical distancing and Clinic set-up sections);
- Provide hand sanitizer stations throughout the venue, including entry, immunization stations and exit;
- Ensure that administration, clinical and patient areas, and washrooms are cleaned and disinfected frequently (guidance for cleaning and disinfection is available at [Environmental Cleaning and Disinfectants for Clinic Settings](#));
- Clean and disinfect immunization stations between clients (e.g., with wipes);
- Carry out hand hygiene before and after providing immunization; and
- Ensure that all staff are trained in the use of PPE (see [donning](#) and [doffing](#) PPE).

Considerations for PPE selection

Physical distancing may be difficult to maintain at immunization venues and the immunization procedure requires close physical proximity between the immunizer and the client. The following recommendations are in alignment with those of the Provincial Infection Control Network (PICNet).

Staff and volunteers

- Immunizers should wear a medical mask and eye protection as should other staff who are not able to maintain a two-metre physical distance (e.g., recovery room monitors and first aid providers);

- Immunizers need not wear gloves, except when administering intranasal influenza vaccine or oral non-influenza vaccines (e.g., rotavirus) because of an increased likelihood of contact with a client's mucous membranes and bodily fluids during these procedures. Gloves should be changed between clients and hand hygiene performed after gloves are removed. Administration of intranasal influenza vaccine is not an aerosol-generating procedure, and additional precautions, such as N95 respirators for immunizers, are not recommended;¹
- Staff and volunteers who are able to maintain a two-metre physical distance or will have only transitory closer contact (such as walking by) should wear a medical mask (eye protection is not required);
- Staff who are behind a barrier do not need to use PPE, except for protection between co-workers behind the barrier;
- PPE may be used for the full duration of a shift, i.e., extended use of the same mask and eye protection but should be replaced after a break. Soiled, wet or damaged masks should be replaced; and
- PPE including medical mask, eye protection, gown and gloves should be immediately available to all personnel who need to provide first aid or respond to a health emergency.

When immunization is provided during another health care visit (e.g., primary care visit, home care or while in hospital), it is anticipated that the health care professional will already be using PPE appropriate for the situation. Additional IPC guidance is available for [home care providers](#).

Clients and their companions

While the guidance within the [Continuity of Immunization Services During COVID-19](#) recommends that a single adult accompany a child for routine immunization, family 'pods' or 'bubbles' should be accommodated for influenza immunization in order to avoid the need for multiple visits to immunize a whole family.

Clients and their companions may be asked to wear a non-medical mask or face covering. This recommendation may be waived for young children for whom mask use is problematic. In addition, non-medical masks or face coverings should not be placed on children under the age of two years, anyone who has trouble breathing, or is unable to remove the mask without assistance.

Clinic set up and immunization process

Priority clinic modifications for COVID-19 have already been identified in this document (screening for illness, physical distancing, and IPC measures). The following are additional suggestions for modifying the clinic set up and immunization process:

- Assess the physical suitability of the site, including the adequacy of ventilation; however, it is appreciated that ideal sites are not always available;
- Consider the size of the site, physical distancing requirements, and restrictions on the size of gatherings when determining the number of clients that can be scheduled in a given time period;
- Provide extra clinic staff and volunteers as needed, e.g., to monitor traffic flow and waiting areas, screen, assist with registration and consent processes, and clean;

¹ Centres for Disease Control and Prevention. Interim guidance for immunization services during the COVID-19 pandemic. Available from: <https://www.cdc.gov/vaccines/pandemic-guidance/>

- Use an appointment system (e.g., online or through a call centre) to make appointments, collect registration information and conduct pre-clinic wellness screening;
- Minimize the number of persons coming to the appointment, (e.g., only the client plus a caregiver if necessary; only bring children if they are being immunized);
- Instruct clients to wear accessible clothing (e.g., short sleeves) to minimize the need for removal of clothing and possibly the mask to gain access to the arm, and to bring a non-medical mask to wear at the clinic;
- Adjust consent and recording processes to reduce contact, make them paperless if possible; have staff complete information forms on behalf of clients, and if a signature is needed for consent, have each client use a separate pen and clean pens between use;
- Minimize movement through the clinic to avoid clients walking through administrative areas, e.g., use a dedicated entrance/exit (where available) and establish one-way traffic flow;
- Ensure that the [cold chain](#) is maintained in all settings including outreach and mobile clinics and outdoor clinics;
- Ensure that clients can be monitored for the recommended observation period following immunization in all settings including mobile and drive-through clinics
 - NACI recommends a 15-minute observation period post-immunization because during this period of time a large proportion of rare but potentially serious allergic events (anaphylaxis) and syncope (fainting, including with fall and head injury or seizure) can occur.² However, in certain circumstances, a shorter observation period of at least 5 minutes may be considered after influenza immunization during the COVID-19 pandemic, but only during times when appropriate physical distancing in post-vaccination waiting areas cannot otherwise be maintained due to the volume of individuals seeking immunization. A shortened observation period following influenza vaccine administration may be considered on a case-by-case basis for clients who have received influenza vaccine before, do not have a history of severe allergic reaction to the influenza vaccine or its components, do not have a history of syncope following receipt any vaccine, agree to stay in the vicinity of the clinic (e.g., parking lot) for at least 15 minutes post immunization with another responsible adult who knows when and how to seek prompt medical attention, and agree not to operate a motorized vehicle during that time.
- Ensure that the supplies necessary to manage anaphylaxis are readily available.³
- Maintain a list of staff and clients attending each clinic to facilitate contact tracing if needed.

Vaccine information can be provided in ways that minimize the use of paper, for example:

- Consider providing vaccine information online or in advance by mail or email;
- At the clinic, provide pre-immunization information on large wall posters or using videos in pre-immunization and post immunization observation areas; add QR codes for additional information; and

² Thirty minutes is a safer duration when there is a specific concern about a possible vaccine reaction to the biological product or a component of the biological product.

³ National Advisory Committee on Immunization. Canadian Immunization Guide: [Part 2 – Vaccine Safety. Early vaccine reactions including anaphylaxis](#). June 2013.

- Ensure that information is accessible (e.g., available in multiple languages as needed).

Additional considerations for other settings

School-based clinics

School-based clinics are used to deliver routine immunizations to children and teens. These clinics may be affected by the impact of ongoing COVID-19 activity on school operations and attendance and public health resource availability.

Considerations for delivery of vaccines at school include:

- Potential need to hold clinics over several days if student attendance is staggered;
- Accessibility of sites usually used for immunization such as gyms or cafeterias;
- Staggering immunization tables and seating in waiting areas to maintain physical distance; and
- Calling in students according to classroom cohorts.

Outreach and mobile clinics

Outreach clinics are an effective way to reach underserved and vulnerable populations and persons unable to attend conventional immunization sites.^{4,5,6} It is important to choose the location carefully. The best options are places that are most frequented by the vulnerable population(s) being targeted, e.g., food banks, shelters for persons experiencing homelessness, centres providing free meals, centres for immigrants and refugees. Partnering with trusted community leaders is also recommended along with advance clinic promotion to encourage attendance.

Additional information can be found in the references provided above and a CDC resource: [Checklist of best practices for vaccination clinics held at satellite, temporary or off-site locations](#).

Outdoor venues, including drive-through clinics

Drive-through and parking lot clinics (also called drive-in clinics) have been used successfully in some jurisdictions in past seasons for the seasonal influenza vaccine, and are particularly useful for people with reduced mobility or those who are apprehensive about a clinic setting. In the COVID-19 situation, these provide a way to maintain physical distancing by avoiding waiting rooms and lineups.

Potential issues for program planners include inclement weather, availability of suitable locales, and occupational health concerns for immunizers (e.g., exposure to auto exhaust or ergonomic issues if they are trying to reach far into a car). There is also potential for shoulder injury in the recipient if the arm is

⁴ Weatherill SA, Buxton JA, Daly PC. Immunization programs in non-traditional settings. *Can J Public Health* 2004;95(2):133-7.

⁵ Kong KL, Chu S, Giles ML. Factors influencing the uptake of influenza vaccine vary among different groups in the hard-to-reach population. *Aust NZ Public Health* 2020;44:163-8. Doi:10.1111/1753-6405.12964.

⁶ Thomsen R, Smyth W, Gardner a, et al. Centrelink; an innovative urban intervention for improving adult Aboriginal and Torres Strait Islander access to vaccination. *Healthcare Infection* 2012;17:136-41. Doi: 10.1071/HI12035

not adequately visualized while they are in the car, resulting in incorrect landmarking of the injection site.⁷

Parking lot clinics – Providing immunization in the parking lot may be a viable option for some primary care practitioners, pharmacies and public health departments. Detailed advice for mounting a parking lot clinic (also called a drive-in clinic) can be found in an Australian resource: [NSW guidance for drive-in immunization clinics](#).

Drive-through clinics – These clinics are larger-scale operations that may be mounted in fixed or rotating locations. Potential venues should offer shelter for the immunization team and sufficient parking for the required post-immunization observation period. Possibilities include community buildings with a marquee, car washes, warehouses, insurance inspection stations, arena parking lots or drive-through tents erected for the occasion.

Planning logistics have been described, including the development of a traffic flow pattern with traffic lanes for the consent and immunization processes and adequate parking spaces for post-immunization monitoring.^{8,9,10,11,12,13}

Clients should be instructed to wear loose-fitting clothes to allow easy access to the deltoid area, and may be recommended to wear a non-medical mask. Clients should be seated to allow window or door access for the immunizer, who should not enter the car. Parents may hold their child on their lap for the child's immunization. The entire upper arm (or upper outer thigh in infants) should be exposed to find the correct injection site.

Remote and isolated communities

Remote and isolated communities have many years of experience with influenza immunization campaigns. In these settings, many of the adaptations outlined earlier in this document will be applicable; however, additional considerations may be needed. Suggestions include:

- Using fly-in teams as an efficient way to provide influenza immunization in some remote and isolated communities. Such teams must be carefully screened according to jurisdictional direction before travel;

⁷ Imran M, Hayley D. Injection-induced axillary nerve injury after a drive-through flu shot. *Clinical Geriatrics* 2013;21(12). Available from: <https://www.consultant360.com/index.php/taxonomy/term/7226>

⁸ Le N, Charney RL, Gerard J. Feasibility of a Novel Combination of Influenza Vaccinations and Child Passenger Safety Seat Fittings in a Drive-through Clinic Setting. *Disaster Med Public Health Prep* 2017;11(6):647-651. doi: 10.1017/dmp.2017.3. Epub 2017 May 2

⁹ Banks LL, Crandall C, Esquibel L. Throughput times for adults and children during two drive-through influenza vaccination clinics. *Disaster Med Public Health Prep* 2013;7(2):175-81. doi: 10.1017/dmp.2013.3.

¹⁰ Gupta A, Evans GW, Heragu SS. Simulation and Optimization Modeling for Drive-Through Mass Vaccination – A Generalized Approach. *Simulation Modelling Practice and Theory* 2013;37(September). Available from: <https://commons.erau.edu/ww-management-science/1>

¹¹ Zenwekh T, McKnight J, Hupert N, et al. Mass medication modelling in response to public health emergencies: outcomes of a drive-through exercise. *J Public Health Management Practice* 2007;13(1);7-15.

¹² Centers for Disease Control and Prevention. Guidance for Considerations for Planning Curbside/Drive-Through Vaccination Clinics. July 2020. Available from: https://canvax.ca/sites/default/files/2020-08/CDC_curbside-vaccination-clinics_2020.pdf

¹³ Centers for Disease Control and Prevention. Guidance for Planning Vaccination Clinics Held at Satellite, Temporary, or Off-Site Locations. July 2020. Available from: <https://www.cdc.gov/vaccines/hcp/admin/mass-clinic-activities/index.html>

- Collaborate with trusted community leaders and Community Health Representatives;
- Promote the clinics as a way to provide community protection in addition to personal protection;
- Set up in popular locations such as grocery stores, and provide immunization door-to-door later for persons unable to attend the clinic; and
- Provide immunization at community pharmacies if accessible in the community.

Lack of internet connectivity in many remote and isolated communities may prevent the use of electronic systems for appointments, registration or recording.

Additional Resources

Canada:

Public Health Agency of Canada. Infection prevention and control for COVID-19: Interim guidance for outpatient and ambulatory care settings. May 23, 2020. Available from: <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/guidance-documents/interim-guidance-outpatient-ambulatory-care-settings.html>

Public Health Agency of Canada. Infection prevention and control for COVID-19: Interim guidance for home care settings. April 24, 2020. Available from: <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/infection-prevention-control-covid-19-interim-guidance-home-care-settings.html>

National Advisory Committee on Immunization. Interim guidance on continuity of immunization programs during the COVID-19 pandemic. May 13, 2020. Available from: <https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/interim-guidance-immunization-programs-during-covid-19-pandemic.html>

Public Health Agency of Canada. Vaccine annex: Canadian Pandemic Influenza Preparedness: Planning Guidance for the Health Sector. Appendix B – Planning Guidance for Mass Immunization Clinics. March 2017. Available from: <https://www.canada.ca/en/public-health/services/flu-influenza/canadian-pandemic-influenza-preparedness-planning-guidance-health-sector/vaccine-annex.html#appb>

National Advisory Committee on Immunization. Recommendations on the Duration of the Post-vaccination Observation Period for Influenza Vaccination during the COVID-19 Pandemic. October 15, 2020. Available from: https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/recommendations-duration-observation-period-post-influenza-vaccination-during-covid-19-pandemic.html?hq_e=el&hq_m=2139400&hq_l=1&hq_v=dfff0f5e91

USA:

Centers for Disease Control and Prevention. Interim guidance for immunization services during the COVID-19 pandemic. Available from: <https://www.cdc.gov/vaccines/pandemic-guidance/>

Centers for Disease Control and Prevention. Guidance for pharmacists. May 28, 2020. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/pharmacies.html>

Centers for Disease Control and Prevention. Guidelines for large-scale influenza vaccination clinic planning. 2015 Dec 16. Available from: https://www.cdc.gov/flu/professionals/vaccination/vax_clinic.htm

Centers for Disease Control and Prevention. Checklist of best practices for vaccination clinics held at satellite, temporary or off-site locations. Available from: <https://www.izsubmitpartners.org/content/uploads/2019/02/off-site-vaccination-clinic-checklist.pdf>

Association of Immunization Managers, Immunization Action Coalition (IAC). Communicating the Benefits of Seasonal Influenza Vaccine during COVID-19 (July 2020). Available from: <https://www.immunize.org/catg.d/p3115.pdf>

