

ANNEX D: PLANNING FOR MASS IMMUNIZATION

D.1. Introduction

In the event of an influenza pandemic, there may be a requirement to quickly mobilize public health resources to provide vaccine or antivirals to large numbers of people. Influenza vaccination has long been considered the cornerstone of influenza prevention and control and will also serve as the central preventive strategy during the next pandemic. In a pandemic the aim is to vaccinate the entire population over a period of four months, on a prioritized basis. Previous experience with outbreak related immunization clinics indicates that it would be prudent to prepare for an initial demand of 75% of the target population. The most effective method for achieving this goal and meeting the demand to the greatest extent possible is to offer mass influenza immunization clinics, which allow the immunization of a large number of people over a short time period.

Health Authorities are responsible for planning and implementing mass immunization clinics in their respective geographical catchment areas. This is not a new concept to public health and is a method commonly used to deliver large quantities of vaccine in response to outbreaks. Some Health Authorities will have more experience than others in mass immunization.

This Annex provides detailed guidelines for planning and conducting mass influenza immunization clinics. Other methods of administering influenza vaccine may also be utilized during a pandemic. These guidelines can also be applied to the administration of antivirals in a mass delivery situation, although this will be undertaken under very limited circumstances.

D.2. Mass Clinic Preparation

Planning for Mass Clinics

Planning for mass clinics will be based on the following expectations:

- ❑ The target population for vaccination will be expanded far beyond the typical high-risk groups to encompass, ideally, the entire population.
- ❑ It is likely that vaccine shortages will exist, especially during the early phases of the pandemic. Consideration must be given to flexibility in planning for (a) severe vaccine shortages, (b) moderate vaccine shortages, and (c) no shortages.

Provincial Responsibilities

Provincial responsibilities include setting the vaccine priority groups (see [Appendix A-2](#)) and the priority order. The list will be subject to change, potentially on short notice, depending on the epidemiology and clinical features of the pandemic influenza strain. As well, circumstances may require the addition of specific groups of people in areas where absences due to influenza illness could pose serious consequences in terms of public safety or disruption of essential community services (e.g. air traffic controllers at major airports).

Specific tasks/responsibilities include:

- Set antiviral priority groups (see [Appendix A-5](#)). This list may be subject to change for the reasons listed above.
- Procure the vaccine and antiviral supply.
- Distribute the vaccine and antivirals and set guidelines for its use.
- Set guidelines for security of storage and transport of vaccine and antivirals.
- Set up a system for documentation/tracking and evaluation.
- Determine how many doses of vaccine are needed.
- Determine minimum qualifications/skills for immunizers.
- Prepare education and communication materials for the various stakeholders in multiple languages, as appropriate and as possible.

Health Authority Responsibilities

Leadership:

- Establish a project leader and a project team, with clear roles and responsibilities (see [Appendix D-2](#))

Vaccine/ Antiviral Issues:

- Calculate local vaccine/antiviral amounts required based on population (see [Annex B](#)) and priority groups (see Appendices [A-2](#), [A-3](#), [A-4](#) & [A-5](#)).
- Calculate all support and requirements for obtaining vaccine and antivirals including vaccine storage, cold chain, security, transport, and disposal within the region.
- Set consent policy for immunization/antiviral use including response to refusals from health care workers and first responders.
- Establish contingency plan(s) for those individuals showing up at the clinic who do not qualify for vaccine/antivirals (i.e. cross border issues and/or ineligible).
- Establish a plan for the management of adverse events.
- Establish plans to vaccinate priority groups within hard-to-reach populations, e.g. those with language or cultural barriers, the homeless, and those with mental illness.

Site Selection:

- Determine the number of facilities required to implement mass clinics, and where they can/will be located (consideration to geographic areas, bus routes, size, etc.).
- Establish special transportation arrangements for those with physical disabilities, the frail elderly and for those with transportation difficulties.

Supplies/Equipment:

- Determine the supplies and equipment needed (see [Appendix D-1](#)).
- Identify available suppliers.
- Plan for bio-medical waste management.

Staffing:

- ❑ Determine what programs will be suspended during the pandemic, and therefore whether additional staff will be available.
- ❑ Identify potential staff (medical personnel, volunteers, translators and security staff) within your organization who will be reassigned/recruited to assist with mass clinics (data base recommended).
- ❑ Establish a centralized staff scheduling process and rapid recall system (data base recommended) which includes a contingency plan for when personnel become ill.
- ❑ Identify staff training needs around mass immunization.

Documentation:

- ❑ Set up a system for documentation/tracking and evaluation of vaccine/antiviral uptake, vaccine supplies, and adverse events.

Communication:

- ❑ Develop a communications plan re: mass clinics and key spokespersons.
- ❑ Determine the necessary information and supplies needed, e.g. clinic information/posters, pamphlets, consents, translations, etc.
- ❑ Consider establishing an information hotline and regularly updated websites.
- ❑ Update NurseLine with clinic times and locations.

Mass Immunization Plan Training:

- ❑ The plan should be reviewed by personnel likely to hold the clinic coordination positions; should be exercised periodically, and necessary updates and amendments put into action.
- ❑ Establish evaluation components for the post pandemic period.
- ❑ Include training for security personnel in handling desperate and/or emotional people.

D.3. Mass Clinic Operations

Facilities

The size and type of facilities needed for mass influenza immunization clinics will vary depending on the number of persons to be served. Examples of central locations are local school auditoriums, arenas (without ice), community center gymnasiums, churches and temples, and shopping malls. Necessary amenities include bathrooms, open areas, near bus routes, familiar locations for public, parking capacity and possible refrigeration.

Clinic Operation

See [Annex D, Figure D-2](#) for the Clinic Flow Chart.

Registration:

- Greeters direct vaccine recipients to registration tables.
- Registrars collect data, confirm eligibility and provide information.
- Vaccine recipients are given a number and asked to wait in the holding area.
- Persons with overt signs of illness are directed to a separate room for more in-depth evaluation with a nurse.

Holding Area/Lounge:

- Client reads information.
- Nurses are available to provide additional information and answer questions.

Vaccination:

- Numbers or letters on flags identify immunizing stations. A volunteer calls out the number who is next and directs that individual to the available station.
- Client screened for precautions/contraindications.
- The vaccine is administered and final instructions and documentation completed.
- Clerk maintains supplies and collects data information.
- Recommendation given to wait for 15 minutes in waiting area near the exit.

Post immunization holding area:

- Client remains in holding area for 15 minutes.
- Clients showing adverse reactions are moved to first aid station.

Project Leader/Team Roles:

- Management and Coordination Functions (oversee all clinics).
- Clinic Nurse Director: Gather and brief clinic personnel, operationalize the mass immunization clinic plans.
- Logistics Coordinator: Ensures that all necessary clinic supplies are on site and are available in sufficient quantities during clinic operations, maintains inventory, oversees distribution of supplies.
- Security Coordinator: Ensures supplies are secure, crowd control, signage etc.
- Volunteer Coordinator: Oversees volunteer activity at the clinic sites, maintains rosters of persons available, makes up duty assignments.

Clinical Staff Functions:

- Nurse Team Leader: Ensures clinic is running efficiently, trouble shoots when necessary.
- Volunteers: Greets vaccine recipients, registers them, directs recipients through the clinic process, monitors clinic flow and serves as runner (s).
- Clerks: Collect data; maintain and monitor uptake of supplies.

- ❑ Security Staff: Ensure an orderly flow of traffic and parking at the clinic site, provide necessary control if persons become unruly, maintain security of vaccines and clinic supplies.
- ❑ Nurses: Assess individuals for contraindications and precautions, administer the vaccine, complete documentation, observe vaccine recipients for immediate reaction or complications.

Clinic Layout and Flow:

- ❑ Clinics should have clearly marked entrance and exit points with adequate waiting space.
- ❑ Traffic flow within the clinic should be controlled and follow a logical path from entry to exit.
- ❑ Easy to read signage should be provided to guide people through the clinic process.
- ❑ Registration and waiting areas should be in a separate room from the vaccine administration and first aid stations where possible.
- ❑ The first-aid station should be located as close to the vaccine administration area as possible.

Figure D-1: Clinic Function Chart

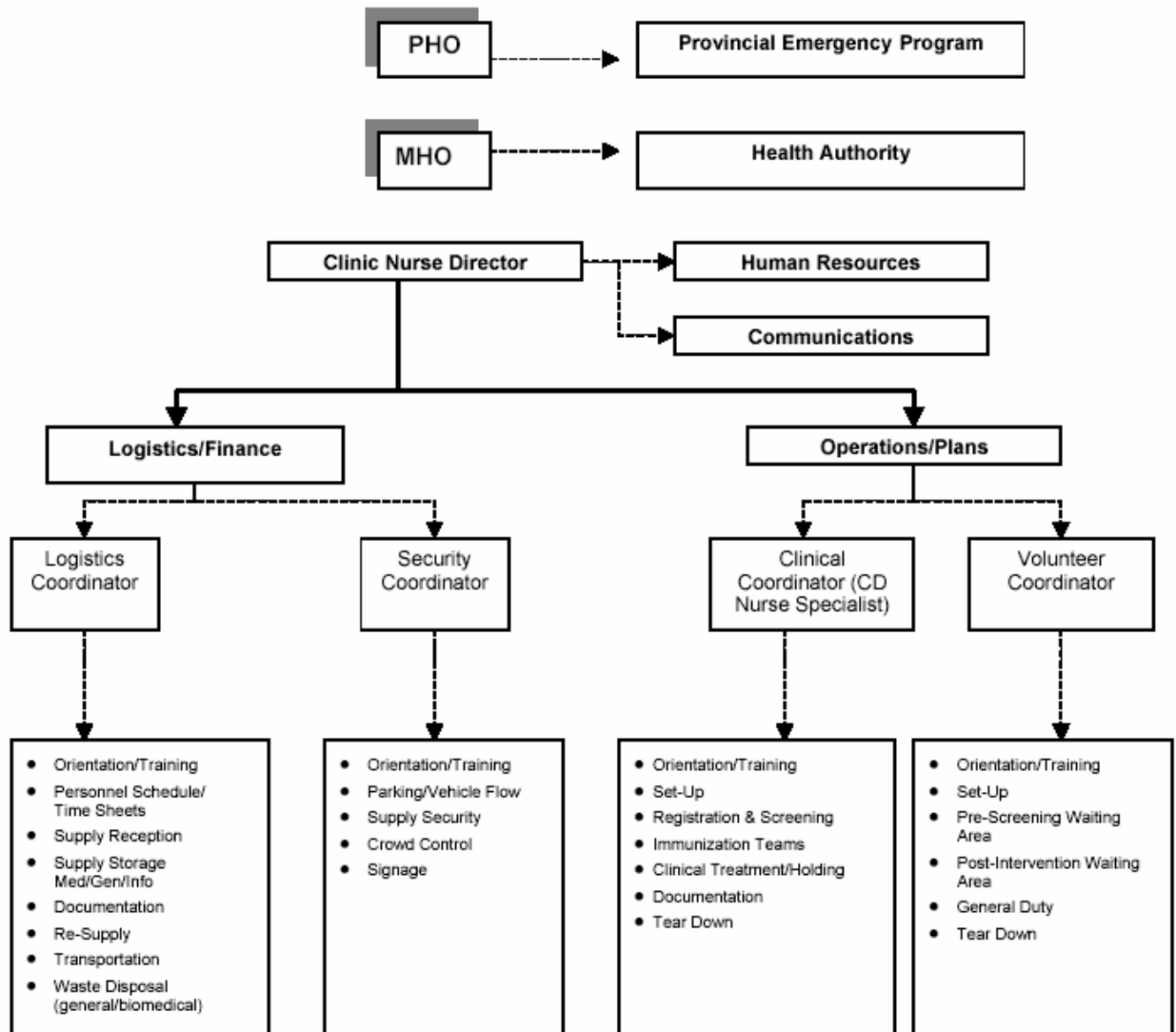
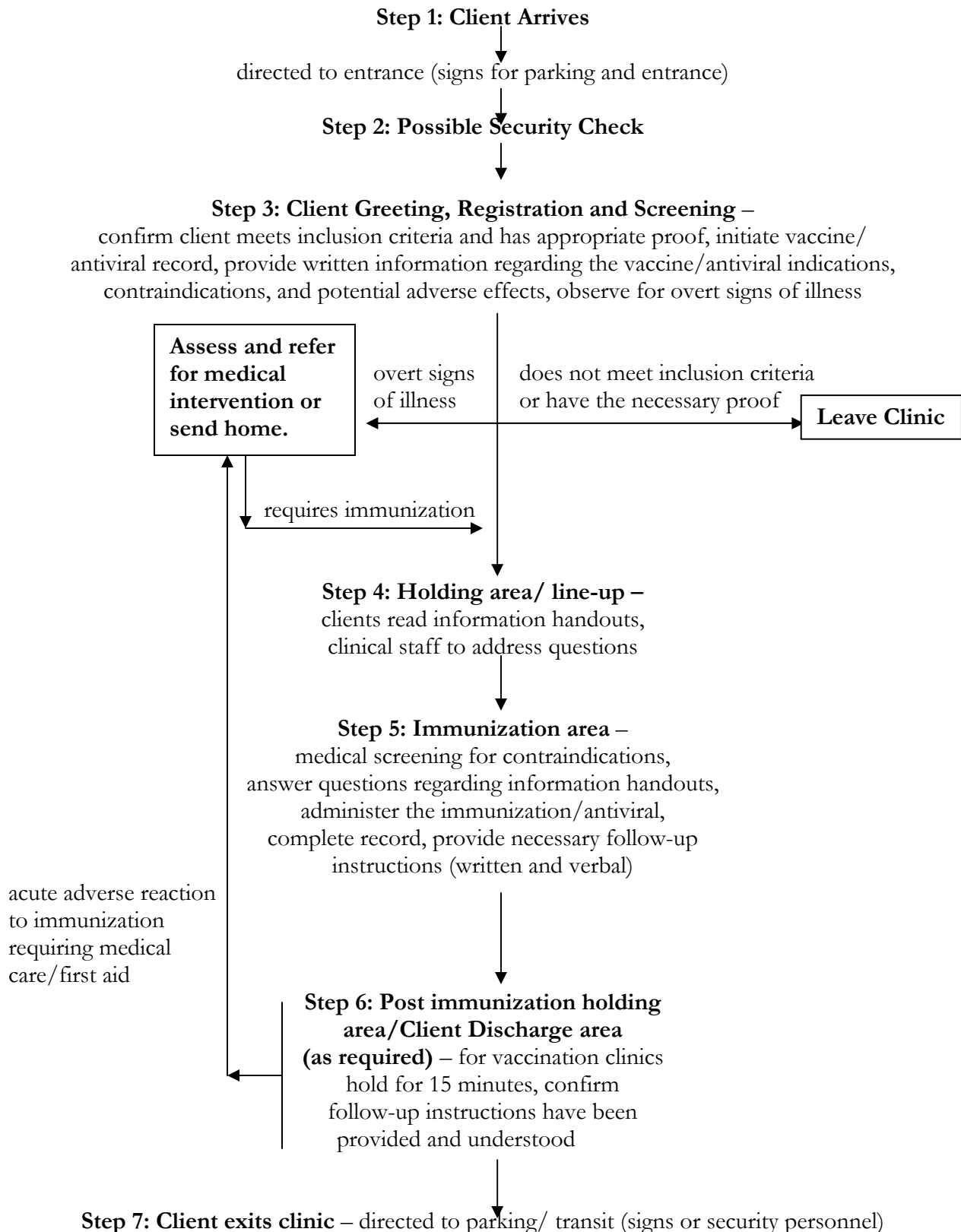


Figure D-2: Clinic/Client Operational Flow Chart



APPENDIX D-1: MASS CLINIC EQUIPMENT LIST “IN-A-BOX”

Equipment requirements will be primarily dependent on the facility selected, the expected clinic capacity, and whether it is vaccine or antivirals being administered. A secure area should be identified for receiving and maintaining supplies and equipment.

The following table should be completed for a clinic with an estimated capacity of 2,500 clients per day in an 8 hour time period. The equipment listed is primarily required for a vaccination clinic, although there is also some included for an antiviral clinic.

Table D-1: Mass Immunization Equipment List

Item	Quantity Required
Medical Supplies/Equipment	
3 cc syringes 1”, 25 gauge needles	
Acetone	
Adhesive tape	
Adult airways	
Alcohol wipes	
Ampoules of diphenhydramine 50 mg IM	
Ampoules of epinephrine 1:1000 SQ	
Antibacterial hand washing solutions	
Blankets	
BP cuff and stethoscope	
Cots/Mats	
Cotton Swabs	
Emesis bags	
Flashlight	
Gloves	
Intravenous supplies	
Needles, 25 gauge 7/8”	
Pediatric airways	
Pillows	
Portable O ₂ with masks and tubing	
Rectangle Band-Aids	
Sharps containers	
Spray bottle of bleach solution	
Tourniquet	
Tuberculin syringes with 5/8” needles (for epinephrine	
Vaccine (doses/day)	
Vaccine cooler/refrigerator (Styrofoam containers and cold packs are adequate for local transport and day use)	
Vaccine information sheets	
For Antiviral Clinics	
Adhesive labels (pre-printed)	

BC Pandemic Influenza Preparedness Plan: Annex D

Item	Quantity Required
Antiviral (client/day x doses/client)	
Medication information sheets	
Pill counting trays and spatulas (automatic pill counter if available)	
Small resealable pouches for pills	
General Supplies and Equipment	
Canteen supplies (e.g., juice, cookies)	
Chairs	
Clipboards	
Cups for water	
Envelopes	
Facial tissue	
File boxes	
Garbage containers	
ID badges for staff (or colour-coded t-shirts, etc.)	
List of emergency telephone numbers	
Paper	
Paper towels	
Pens and pencils	
Portable partitions (or other material to provide a limited number of private areas)	
Post-it notes	
Rubber bands	
Scissors	
Signage	
Stapler and staples	
Table pads and clean paper to cover table for work site	
Tables	
Tape	
Telephone (fixed and mobile)	
Trash bags	
Water	
Training and Communications Equipment	
Computers	
Photocopier paper (perhaps already in facility)	
Printers	
Public announcement system or bullhorn(s)	
Two-way hand-held radios or messaging devices for key personnel and security staff	
VCR/TV (for orientation and training, as necessary)	
Video camera (for orientation and training, as necessary)	

APPENDIX D-2: IMMUNIZATION TEAM “IN-A-BOX”

The concept of a “team in-a-box” can be adapted to meet the needs of the population to be immunized, the size of the immunization facilities, and so on. It has been formulated to immunize 2,500 people per day during an 8 hour shift at one site.

- ❑ 1 Nurse team leader.
- ❑ 20 Nurses: screening, medical assessment, addressing questions, immunizing and medical management of adverse events.
- ❑ 8 Volunteers: 1 greeter, 4 for registration, 2 directing traffic flow, 1 runner.
- ❑ 2 Clerical: 1 to maintain supplies at stations, 1 to collect data.
- ❑ 2 Security people (minimum).