

## ANNEX G: PROVINCIAL HEALTH AGENCIES' ROLES AND RESPONSIBILITIES

This Annex provides guidelines for the provincial and regional roles and responsibilities during the three pandemic phases: pre-pandemic, pandemic and post-pandemic. It is recognized that roles and responsibilities will vary by region depending on each region's organizational structure, geography, and culture. Regional plans should, therefore, clearly describe the specific roles and responsibilities within their health authorities and organizational structures, using this Annex as a guide.

The roles and responsibilities are provided as Appendices to this Annex:

- ❑ BC Centre for Disease Control (BCCDC): [Appendix G-1](#)
- ❑ Provincial Health Officer (PHO) and Ministry of Health Services (MOHS): [Appendix G-2](#)
- ❑ Medical Health Officers (MHOs): [Appendix G-3](#)
- ❑ Health Authorities (HAs) and Public Health Nursing Leaders (PHNLs): [Appendix G-4](#)
- ❑ Laboratories: [Appendix G-5](#)
- ❑ Pharmacists: [Appendix G-6](#)
- ❑ BC Ambulance Services (BCAS): [Appendix G-7](#)

### APPENDIX G-1: BC CENTRE FOR DISEASE CONTROL (BCCDC)

#### PRE-PANDEMIC

##### *Emergency Planning and Response*

- ❑ Work with PHO, MOHS and other key partners to develop, test and refine the provincial pandemic influenza plan.
- ❑ Establish provincial partnerships & mechanisms for coordinating response between and among agencies.

##### *Vaccines*

- ❑ Promote annual influenza vaccine uptake.
- ❑ Promote increased uptake of pneumococcal vaccine.
- ❑ Inform others such as ministries and legislators of the importance of pandemic influenza in order to gain support for vaccine-related resources.
- ❑ Determine if there are resources in other programs which could be accessed in the event of a pandemic.
- ❑ Establish annual vaccine uptake targets and develop methods to measure this uptake, particularly among high-risk groups.
- ❑ Define & refine the provincial vaccine priority groups based on the national priority groups and according to the epidemiology of circulating influenza disease.
- ❑ Determine alternatives to vaccination for those who cannot be immunized because of medical contraindications (e.g., egg hypersensitivity, prior anaphylaxis).
- ❑ Identify anticipated hard to reach populations (e.g., the homeless; certain ethnic groups, especially those with language barriers).

- ❑ Develop, in cooperation and conjunction with other agencies/groups, strategies for immunizing hard to reach populations.
- ❑ Discuss expectations regarding people who refuse vaccination during the pandemic.
- ❑ Coordinate with the MHOs and HAs to develop vaccine estimates and proposed pandemic allotments for each HA/HSDA.
- ❑ Explore storage/security capacity for vaccine.
- ❑ Explore feasibility of stockpiling vaccine-related supplies (e.g., needles and syringes) and communicate findings to the HAs.
- ❑ Participate in the development of immunization protocols for mass or select clinic setting(s). Involve HAs, industry, professional regulatory bodies, unions, and universities in the development process.
- ❑ Develop plans for three levels of vaccine supply – “critical”, “limited” and “sufficient” quantities. Plans should include: what constitutes these amounts, how vaccine will be distributed, and ethical issues regarding distribution of “critical” or “limited” supply.
- ❑ Develop guidelines regarding ordering, delivery, storage and distribution of vaccine by institutions, health care facilities, or distribution centers.
- ❑ Provide vaccine distribution information to key contact persons in each HA, each of whom is responsible for further dissemination to their regional stakeholders.
- ❑ Maintain the electronic reporting of influenza vaccine adverse events from the health units to BCCDC via the Integrated Public Health Information System (iPHIS).
- ❑ Determine if the current electronic transmission methods of reporting adverse events is anticipated to be adequate during the pandemic.
- ❑ Assess liability issues re: illness and death among those who are not targeted and/or not eligible for immunization during an influenza pandemic.
- ❑ Determine the need for a vaccine compensation plan.
- ❑ Develop promotional, media and educational materials as well as presentations on the importance of vaccine aimed at target groups (e.g., health care workers).
- ❑ Develop training package(s) on influenza vaccine administration to be used by groups (e.g., first responders) to immunize their members.
- ❑ Develop and disseminate Question and Answer sheets regarding pandemic influenza vaccine issues.
- ❑ In partnership with pharmacists, develop written information for public education regarding vaccine recommendations, contraindications, dosage and potential vaccine associated adverse events.

### *Antivirals*

- ❑ Define and refine the provincial antiviral priority groups based on national priority groups and according to the epidemiology of circulating influenza disease.
- ❑ Coordinate with the MHOs and HAs to develop antiviral estimates for treatment and prophylaxis and proposed pandemic allotments for each HA/HSDA.
- ❑ Support/negotiate funding arrangements with the federal government for the purchase of an antiviral stockpile.
- ❑ Stockpile antivirals (i.e., amantadine and/or oseltamivir, with the latter being preferred because of the lesser chance of resistance) in accordance with provincial and federal initiatives.

- ❑ Consider stockpiling raw materials (5 year shelf-life oseltamivir powder which could be reconstituted) and explore resources required for processing the powder.
- ❑ Develop plans for antiviral distribution and delivery.
- ❑ Develop protocols or algorithms for choosing the correct antiviral drug(s).
- ❑ In communication with MHOs, develop plans for antiviral administration during facility influenza outbreaks, including treatment of patients and health care worker (HCW) prophylaxis.
- ❑ Develop, maintain and enhance surveillance activities for adverse antiviral drug reactions.
- ❑ Assist or support research projects regarding antiviral drug use for treatment and prophylaxis of influenza disease, antiviral effectiveness, adverse events/side effects, and assessment of viral resistance to antivirals.
- ❑ In partnership with pharmacists, develop educational materials for public education to promote awareness about different antivirals, their indications, contraindications and associated adverse events/side effects.
- ❑ Develop a variety of methods to educate physicians about antiviral choices and issues, including prevention of amantadine resistance in long-term care facilities and monitoring of amantadine resistance during inter-pandemic years.
- ❑ Develop and disseminate Question and Answer sheets regarding antiviral drug issues.

### *Communications*

- ❑ In consultation with the BC Public Affairs Bureau, the Health Authority communications staff and the PIC, develop a Pandemic Influenza Communications Plan (see Annex K: Communications Planning). This plan should include:
  - strategies for ongoing communications with relevant ministries and policy makers during all pandemic phases;
  - policy regarding who will be authorized to make public statements; and
  - identification of positions/people which/who will liaise between health authorities, other provincial agencies and government ministries.
- ❑ Develop plans to maintain communication between provincial agencies and essential service providers, including emergency responders, utilities, transportation services and others.
- ❑ Educate health care providers, policy makers and the public regarding pandemic influenza and emergency plans.
- ❑ Ensure that pandemic-related information can be communicated, as appropriate, in a timely manner to health care practitioners and professional across the province.
- ❑ In partnership with the PHO and MOHS, MHOs, HAs and PHNLs and pharmacists, educate the public and physicians about proper antibiotic use to prevent and/or minimize drug resistance, which could directly affect the effectiveness of treatment of influenza complications such as secondary bacterial pneumonia.

## **PANDEMIC**

### *Emergency Planning and Response*

- ❑ Work with PHO, MOHS and other key partners to implement and adapt the provincial pandemic influenza plan.

- ❑ Monitor geographic spread of the pandemic influenza virus.
- ❑ Monitor epidemiology of influenza infection and illness (morbidity, severity, mortality, age distribution, etc.)

### *Vaccines*

- ❑ Liaise nationally and provincially with epidemiologists and other public health regulators regarding vaccination goals, strategies, adverse events and effectiveness.
- ❑ Refine the provincial vaccine priority groups based on national priority groups and according to the epidemiology of the pandemic influenza strain.
- ❑ Develop and/or revise as needed vaccine-related policies for public health units, hospitals, health care facilities and physicians.
- ❑ Communicate provincial vaccine priority groups and other relevant policies/protocols to HAs and to the public.
- ❑ Communicate rapidly any changes in the protocols re: priority groups and/or influenza vaccine implementation and delivery to the MHOs, HAs and PHNLs.
- ❑ Confirm federal and provincial vaccine funding at the start of the pandemic and ongoing as activity increases and decreases.
- ❑ Secure vaccine supply through national process.
- ❑ Monitor vaccine supply throughout the pandemic period.
- ❑ Develop guidelines and protocols for security of vaccine at BCCDC to ensure supplies are not stolen or misdirected and support regions in ensuring similar security in their areas.
- ❑ Coordinate with the MHOs and HAs to refine vaccine requirements by priority group.
- ❑ Distribute vaccine to the HAs/HSDAs.
- ❑ Liaise with the PHO and MOHS regarding the status of vaccine coverage, mass immunization clinic successes/failures, and the number of people immunized on a daily/weekly/monthly basis.
- ❑ Provide information to HAs regarding cold chain issues (for proper vaccine storage and handling) to minimize vaccine wastage.
- ❑ Coordinate, if needed, geographic vaccine redistribution around the province.
- ❑ Implement surveillance to:
  - ❑ monitor vaccine uptake (use and wastage);
  - ❑ monitor vaccine adverse events; and
  - ❑ monitor vaccine effectiveness.
- ❑ Report results of vaccine surveillance provincially and nationally.
- ❑ Liaise with the PHO and MOHS regarding vaccine associated adverse events and other serious vaccine-related concerns.
- ❑ Communicate regularly with the PHO and MOHS and with MHOs regarding the status of pertinent influenza vaccine issues.
- ❑ Communicate pandemic influenza vaccination goals.
- ❑ Provide information to health care providers and professionals on ethical decisions regarding those who are not eligible to receive pandemic influenza vaccine.
- ❑ Revise, as needed, Question and Answer sheets regarding pandemic influenza vaccine issues.
- ❑ Support evaluation and research protocols for:
  - vaccine immunogenicity, efficacy and effectiveness;
  - vaccine adverse events;

- appropriate number and quantity of doses; and
- strain mutation and implications re: vaccine effectiveness.

### *Antivirals*

- ❑ Refine the provincial antiviral priority groups based on national priority groups and according to the epidemiology of the pandemic influenza strain.
- ❑ Communicate priorities, recommendations and guidelines for antiviral drug use.
- ❑ Confirm federal and provincial funding for antivirals.
- ❑ Secure antiviral supply through national and/or provincial process(es).
- ❑ Monitor antiviral supply remaining at BCCDC throughout the pandemic period.
- ❑ Coordinate with MHOs and HAs to refine antiviral requirements by priority group.
- ❑ Distribute antivirals to the HAs/HSDAs.
- ❑ Provide information to the HAs regarding proper antiviral storage.
- ❑ Coordinate, if needed, geographic antiviral redistribution around the province.
- ❑ Implement surveillance to:
  - monitor antiviral utilization (use and wastage);
  - monitor antiviral adverse events/side effects;
  - monitor antiviral effectiveness for treatment and for prophylaxis.
- ❑ Report results of antiviral surveillance provincially and nationally.
- ❑ Communicate regularly with the PHO and MOHS and with MHOs regarding the status of pertinent antiviral issues.
- ❑ Liaise with the BCCDC laboratory to ensure that influenza isolates are monitored for antiviral susceptibility.
- ❑ Revise, as needed, Question and Answer sheets regarding antiviral drug issues.
- ❑ Support evaluation and research protocols for:
  - antiviral efficacy and effectiveness;
  - appropriate antiviral dosage; and
  - influenza strain mutation and resistance.

### *Communications*

- ❑ In consultation with the BC Public Affairs Bureau, the Health Authority communications staff and the PIC, operationalize Pandemic Influenza Communications Plan (see Annex K: Communications Planning).
- ❑ Designate an appropriate spokesperson to update the media regularly.
- ❑ Provide regular internal communications for BCCDC staff.

## **POST-PANDEMIC**

### *Emergency Planning and Response*

- ❑ Work with PHO, MOHS and other key partners to revise and update the BC Pandemic Influenza Preparedness Plan based on pandemic experience.
- ❑ Compile, submit and/or pay bills as appropriate.

### *Vaccines*

- ❑ Advise MHOs and HAs regarding the return or disposal of excess vaccine.
- ❑ Ensure that vaccine adverse event reports are completed and provided to BCCDC.
- ❑ Summarize vaccine coverage data by target group.
- ❑ Evaluate vaccine effectiveness in preventing infection and reducing morbidity and mortality.
- ❑ In partnership with the PHO and MOHS:
  - Compile an evaluation report on influenza vaccine uptake (coverage, use and wastage), by targeted risk group, during the pandemic.
  - Assess and evaluate the effectiveness of public vaccine delivery.
  - Assess and evaluate the effectiveness of occupational (e.g., health care worker) vaccine delivery.
  - Evaluate the adequacy of volunteer training for assisting in immunization clinics.
  - Evaluate the effectiveness and appropriateness of promotional and educational materials regarding the importance of influenza vaccine.
  - Assess the overall functioning and success of the pandemic influenza vaccine program.
  - Ensure that pandemic vaccine adverse event reports are completed.
  - Summarize the impact of vaccine use and communicate nationally, provincially and locally.

### *Antivirals*

- ❑ Advise MHOs and HAs regarding the return or disposal of excess antivirals.
- ❑ In partnership with the PHO and MOHS:
  - Evaluate antiviral effectiveness in preventing infection, reducing morbidity and mortality, outbreak control and treatment of influenza infection.
  - Complete and distribute evaluation reports on antiviral use/uptake, adverse events/side effects and effectiveness in preventing morbidity and mortality.
  - Assess the overall functioning and success of the pandemic influenza antiviral process.
  - Summarize the impact of antiviral use and communicate findings nationally, provincially and locally.
  - Liaise with the BCCDC laboratory to describe drug resistance pattern observed in pandemic influenza isolates.
- ❑ In partnership with the PHO and MOHS, summarize pandemic antiviral resistance patterns.

### *Communications*

- ❑ In consultation with the BC Public Affairs Bureau, the Health Authority communications staff and the PIC, revise and update Pandemic Influenza Communications Plan based on pandemic influenza experience.

## **APPENDIX G-2: PROVINCIAL HEALTH OFFICER (PHO) AND MINISTRY OF HEALTH SERVICES (MOHS)/EMERGENCY MANAGEMENT BRANCH**

### **PRE-PANDEMIC**

#### *Emergency Planning and Response*

- Work with BCCDC and other key partners to develop, test and refine the provincial pandemic influenza plan.
- Advocate for collaborative emergency preparedness planning among all health care agencies.
- Provide the HAs with information about the necessary pre-pandemic emergency planning for pandemic influenza, and support their planning efforts.
- Encourage community stakeholders to take measures to ensure continued essential services during a pandemic.
- Ensure that other government ministries are informed of pandemic planning progress and solicit support for planning efforts.
- Review and update emergency management and contingency plans as needed.

#### *Vaccines*

- Endorse press releases regarding the importance of annual influenza vaccination.
- Advocate for education about annual influenza vaccination.
- Promote awareness and importance of the pandemic and the role of mass immunization clinics via the provincial Communications Department.

#### *Antivirals*

- Ensure that MHOs are informed of national guidelines for dispensing antivirals for prophylaxis.
- Ensure contingency plan is in place for the increase in demand for antivirals.

#### *Communications*

- Provide the media with information about influenza and pandemic influenza.
- Ensure communication networks and systems are in place and are tested periodically.
- Identify communication gaps and identify resource needs.
- In partnership with BCCDC, MHOs, HAs and PHNLs and pharmacists, educate the public and physicians about proper antibiotic use to prevent and/or minimize drug resistance, which could directly affect the effectiveness of treatment of influenza complications such as secondary bacterial pneumonia.

### PANDEMIC

#### *Emergency Planning and Response*

- Work with BCCDC and other key partners to implement and adapt the provincial pandemic influenza plan.
- Declare the influenza pandemic when appropriate.
- Provide overall direction during the pandemic.
- Request the activation of provincial government emergency response systems as required.

#### *Vaccines*

- Communicate regularly with BCCDC and MHOs regarding the status of pertinent influenza vaccine issues.
- Report to the BC Minister of Health Services regarding pandemic vaccine issues such as efficacy, supply, uptake, etc.
- Liaise with BCCDC regarding status of vaccine coverage, mass immunization clinic successes/failures, and the number of people immunized on a daily/weekly/monthly basis.
- Liaise with BCCDC regarding the number and severity of adverse events following administration of a new vaccine strain and other serious vaccine-related concerns.

#### *Antivirals*

- Communicate regularly with BCCDC and MHOs regarding the status of antiviral issues.
- Authorize priority distribution of antivirals.

#### *Communications*

- Activate pandemic communications plan and modify it as required.
- Establish communication with provincial, territorial and federal health officials.
- Ensure continued communication with national and international partners
- Ensure that consistent, accurate and clear communication is being delivered to the province.
- In consultation with the BC Public Affairs Bureau, the Health Authority communications staff and the PIC, designate the PHO or other appropriate spokesperson from the MOHS to update the media regularly.

### POST-PANDEMIC

#### *Emergency Planning and Response*

- Review and assess overall healthcare emergency response to the pandemic.
- Review and update MOHS emergency plans.
- Work with BCCDC and other key partners to revise and update the BC Pandemic Influenza Preparedness Plan based on pandemic experience.
- Recommend demobilization of EOCs within the health authorities.
- Compile, submit and/or pay bills as appropriate.

### *Vaccines*

- ❑ In partnership with BCCDC:
  - Compile an evaluation report on influenza vaccine uptake (coverage, use and wastage), by targeted risk group, during the pandemic.
  - Assess and evaluate the effectiveness of public vaccine delivery in preventing infection, reducing morbidity and mortality and outbreak control.
  - Assess and evaluate the effectiveness of occupational (e.g., health care worker) vaccine delivery in preventing infection, reducing morbidity and mortality and outbreak control.
  - Evaluate the adequacy of volunteer training for assisting in immunization clinics and non-traditional care sites.
  - Evaluate the effectiveness and appropriateness of promotional and educational materials regarding the importance of influenza vaccine.
  - Assess the overall functioning and success of the pandemic influenza vaccine program.
  - Ensure that pandemic vaccine adverse event reports are completed.
  - Summarize the impact of vaccine use and communicate nationally, provincially and locally.

### *Antivirals*

- ❑ In partnership with BCCDC,
  - Evaluate antiviral effectiveness in preventing infection, reducing morbidity and mortality, outbreak control and treatment of influenza infection.
  - Complete and distribute evaluation reports on antiviral use/uptake, adverse events/side effects and effectiveness in preventing morbidity and mortality.
  - Assess the overall functioning and success of the pandemic influenza antiviral process.
  - Summarize the impact of antiviral use and communicate nationally, provincially and locally.
  - Describe resistance patterns observed in pandemic influenza isolates.

### *Communications*

- ❑ Inform public of the end of the pandemic and plans for recovery.
- ❑ Evaluate communication plan and revise as needed.

## APPENDIX G-3: MEDICAL HEALTH OFFICERS (MHOS)

At the regional level of the public health delivery system, the key players are the Medical Health Officers, the health authorities and public health nursing. The Medical Health Officers in each health authority will coordinate activities to develop plans and respond to issues. Please also refer to [Appendix G-4: Health Authorities and Public Health Nursing Leaders](#) for roles and responsibilities that overlap with those of the health authorities and public health nursing leaders.

### PRE-PANDEMIC

#### *Emergency Planning and Response*

- ❑ Establish local partnerships (including partnerships with First Nations health authorities and bands) and mechanisms for coordinating emergency response.
- ❑ Hold bi-annual emergency preparedness practice sessions for health care workers working in hospitals and public health units/agencies in conjunction with the other agencies, i.e., local government.
- ❑ Identify staff for redistribution and deployment during the pandemic as needed and appropriate.
- ❑ Develop protocol for controlling/managing long term care facility influenza outbreaks.

#### *Vaccines*

- ❑ Promote annual influenza and pneumococcal vaccine uptake for identified target groups.
- ❑ In partnership with HAs, determine anticipated local pandemic vaccine requirements by priority groups and communicate to BCCDC.
- ❑ Explore the availability of vaccine storage depots with local officials.
- ❑ Estimate necessary human resource requirements for mass immunization clinics.
- ❑ Establish local partnerships and mechanisms for coordinating pandemic vaccination programs.
- ❑ In partnership with the HAs, ensure vaccine distribution information is disseminated to appropriate persons in each health service delivery area (HSDA) and/or health unit.
- ❑ Stockpile vaccine-related supplies (e.g., needles and syringes).
- ❑ Establish a pandemic influenza immunization committee and/or participate in/communicate with such provincial committee(s) to develop immunization protocols for mass or select clinic setting(s), to identify roles/responsibilities, to identify mechanics of administration and to plan for mass immunization clinics.
- ❑ Educate health care workers regarding the importance of pre-pandemic influenza vaccine for risk groups and for themselves in order to reach the targeted goals of the National Advisory Committee on Immunization (NACI) as published annually in the Canada Communicable Disease Report (<http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/ccdr-rmtc/index.html>).
- ❑ Increase the public's awareness about pandemic influenza vaccine through education, promotion, the media, and presentations.

### *Antivirals*

- ❑ In partnership with HAs, develop estimated pandemic antiviral needs for treatment and prophylaxis for each HA/HSDA and communicate to BCCDC.
- ❑ Explore the availability of antiviral storage depots with local officials.
- ❑ Adopt national guidelines for dispensing antivirals for prophylaxis through local public health units.
- ❑ Develop strategies for dealing with refusal of prophylactic antivirals.
- ❑ Develop education materials for health care facilities and physicians to promote awareness of different types of antivirals.

### *Communications*

- ❑ Ensure that communication networks are established between the MHO, HAs and provincial agencies, as appropriate.
- ❑ In partnership with BCCDC, the PHO and MOHS, HAs and PHNLs and pharmacists, educate the public and physicians about proper antibiotic use to prevent and/or minimize drug resistance, which could directly affect the effectiveness of treatment of influenza complications such as secondary bacterial pneumonia.

## **PANDEMIC**

### *Emergency Planning and Response*

- ❑ Redistribute and deploy staff as needed and appropriate.
- ❑ Liaise with long term care facilities regarding outbreak investigation and management, in particular use of influenza vaccine and antivirals for staff and residents.

### *Vaccines*

- ❑ In partnership with HAs, refine local vaccine requirements by priority groups and communicate to BCCDC.
- ❑ In partnership with local officials, secure vaccine storage depots and ensure the security of these depots to ensure supplies are not stolen or misdirected.
- ❑ In partnership with BCCDC, HAs and PHNLs, ensure that cold chain protocols (for proper vaccine storage and handling) are provided and implemented to minimize vaccine wastage.
- ❑ Implement the immunization protocols and guidelines developed by the provincial pandemic influenza committees and by the provincial/regional pandemic influenza immunization committee(s).
- ❑ Communicate regularly with BCCDC and with the PHO and MOHS regarding the status of pertinent influenza vaccine issues.
- ❑ Liaise with local partners to ensure coordinated pandemic vaccine programs.
- ❑ Finalize and recruit necessary human resource requirements needed for mass immunization clinics.
- ❑ Communicate regularly with BCCDC to remain current with changes in the implementation of influenza vaccine delivery during the pandemic.

- ❑ In partnership with BCCDC, contribute to geographic vaccine redistribution process if needed.
- ❑ Communicate with other MHOs within BC and in other provinces regarding progress with influenza vaccine delivery and related issues.
- ❑ Review adverse event forms following influenza vaccine receipt.
- ❑ Increase the public's awareness about pandemic influenza vaccine through education, promotion, the media, and presentations.

### *Antivirals*

- ❑ In partnership with BCCDC, contribute to geographic antiviral redistribution process if needed.
- ❑ In partnership with HAs and PHNLs:
  - Refine antiviral need estimates by priority group and communicate to BCCDC.
  - Secure regional and local storage sites for antivirals.
  - Ensure protocols for proper antiviral storage are provided and implemented.
  - Mobilize groups who administer antivirals.
  - Arrange mass antiviral clinic sites/dates/times.
  - Disseminate information about antiviral drug clinics and other pertinent information about antivirals to the public and health care providers.
  - Dispense antivirals to priority groups.
  - Dispense antivirals to hospitals, LTCF and workplaces.
  - Ensure informed consent is obtained from individuals receiving antivirals.
  - Record appropriate epidemiological information related to antiviral recipients.
  - Document antiviral refusals.
  - Monitor antiviral adverse events/side effects.
  - Track antiviral use and uptake (use, wastage).
  - Monitor antiviral use to control black market impact on supply.
  - In partnership with BCCDC, collect and report antiviral drug efficacy and effectiveness in preventing morbidity and mortality.
- ❑ Communicate regularly with BCCDC and with the PHO and MOHS regarding the status of pertinent antiviral issues.

### *Communications*

- ❑ Designate an appropriate spokesperson to update the media regularly.
- ❑ Inform the public and the media about access to health services during the pandemic.

## **POST-PANDEMIC**

### *Emergency Planning and Response*

- ❑ Summarize local pandemic impact.
- ❑ Evaluate and summarize the success of pandemic influenza programs – in particular emergency response plans, pandemic influenza plans, vaccine programs and antiviral

programs – and their success in achieving the goals of minimizing influenza-related morbidity, mortality and societal disruption.

- Communicate with provincial and interprovincial MHOs regarding pandemic emergency issues.
- In partnership with public health nursing, implement critical incident stress debriefing and counselling services for the public at the local level.
- Send evaluative report regarding emergency services to the PHO.
- Refine local pandemic influenza plan(s) to reflect lessons learned.
- Compile, submit and/or pay bills as appropriate.

### *Vaccines*

- Collate local information on vaccine uptake and adverse events.
- Collate local information on the vaccine distribution process (how it was done, how well it was done).
- Evaluate and summarize the local impact of vaccine programs in terms of preventing and/or minimizing influenza-related morbidity and mortality.
- Communicate evaluation and summary provincially (to PHO) and locally.
- Ensure all adverse event forms are completed and submitted to BCCDC.
- In partnership with HAs and PHNLs, return or dispose of excess vaccine as instructed by BCCDC.

### *Antivirals*

- Collate information on antiviral uptake and adverse events/side effects.
- Collate information on the antiviral distribution process (how it was done, how well it was done).
- Evaluate and summarize the local impact of antiviral programs in terms of preventing and/or minimizing influenza-related morbidity and mortality.
- Communicate evaluation and summary provincial (to PHO) and locally.
- In partnership with HAs and PHNLs, return or dispose of excess antivirals as instructed by BCCDC.
- In partnership with BCCDC, summarize pandemic antiviral resistance pattern.

## APPENDIX G-4: HEALTH AUTHORITIES (HA) AND PUBLIC HEALTH NURSING LEADERS (PHNL)

At the regional level of the public health delivery system, the key players are the Medical Health Officers, the Health Emergency Manager and the Public Health Nursing Administrator. The Medical Health Officers in each health authority will coordinate activities to develop plans and respond to issues. Please also refer to [Appendix G-3: Medical Health Officers](#) for roles and responsibilities that overlap with those of the Medical Health Officer.

### PRE-PANDEMIC

#### *Emergency Planning and Response*

- ❑ In partnership with the MHO, develop emergency/disaster/pandemic influenza plan(s).
- ❑ In conjunction with local public health officials, utilize charts (see Annex B) and/or software (e.g., FluAid <http://www2.cdc.gov/od/fluaid/default.htm>) to estimate the anticipated number hospital admissions, outpatient visits and deaths by high risk patients and non-high risk patients during an influenza pandemic.
- ❑ Attend bi-annual emergency preparedness practice sessions for health care workers working in hospitals and public health units/agencies.
- ❑ Participate in national pandemic planning day(s) and focus on health services issues.
- ❑ Practice mock pandemic influenza exercises every 2-3 years.
- ❑ Develop guidelines for employee health.
- ❑ Develop guidelines for postponement of elective surgery.
- ❑ Develop guidelines to address the provision of medical care in non-traditional settings, such as shelters, schools, gymnasiums, nursing homes, day care centres, and others (see Annexes [D](#) and [E](#) for detail and guidelines).
- ❑ Identify acceptable equipment alternatives (e.g., handwashing solutions, types of face masks, types of ventilators).
- ❑ Coordinate accountability mechanisms such as hospital accreditation based on influenza pandemic planning standards.

#### *Vaccines*

- ❑ In partnership with the MHOs, explore the availability of vaccine storage depots with local officials.
- ❑ In partnership with the MHOs, ensure that vaccine distribution information is disseminated to appropriate person in each HSDA and/or health unit.

#### *Antivirals*

- ❑ In partnership with the MHOs, explore the availability of antiviral storage depots with local officials.
- ❑ Coordinate with BCCDC and the MHOs to develop antiviral estimates for treatment and prophylaxis and proposed pandemic allotments to each HA/HSDA.

### *Communications*

- ❑ Ensure that communication networks are established between the MHOs, HAs and provincial agencies, as appropriate.
- ❑ In partnership with BCCDC, the PHO and MOHS, MHOs and pharmacists, educate the public and physicians about proper antibiotic use to prevent and/or minimize drug resistance, which could directly affect the effectiveness of treatment of influenza complications such as secondary bacterial pneumonia.

## **PANDEMIC**

### *Emergency Planning and Response*

- ❑ Work with key stakeholders to coordinate regional/municipal/local emergency response operations (see Annex F for Municipal/Local Government roles).

### *Vaccines*

- ❑ In partnership with the MHOs, refine local vaccine requirements by priority groups and communicate to BCCDC.
- ❑ In partnership with the MHOs, coordinate with local partners to ensure coordinated pandemic influenza vaccine programs.
- ❑ In partnership with the MHOs and local officials, secure vaccine storage depots and ensure the security of these depots to ensure supplies are not stolen or misdirected.
- ❑ In partnership with BCCDC and the MHOs, ensure that cold chain protocols (for proper vaccine storage and handling) are provided and implemented to minimize vaccine wastage.
- ❑ Hold mass immunization clinics (see Annex D).
- ❑ Provide information regarding vaccine issues to the public and media.
- ❑ Report vaccine adverse reactions to BCCDC.

### *Antivirals*

- ❑ In partnership with the MHOs:
  - Refine antiviral need estimates by priority group and communicate to BCCDC.
  - Secure regional and local storage sites for antivirals.
  - Ensure protocols for proper antiviral storage are provided and implemented.
  - Mobilize groups who administer antivirals.
  - Arrange mass antiviral clinic sites/dates/times.
  - Disseminate information about antiviral drug clinics and other pertinent information about antivirals to the public and health care providers.
  - Dispense antivirals to priority groups.
  - Dispense antivirals to hospitals, LTCF and workplaces.
  - Ensure informed consent is obtained from individuals receiving antivirals.
  - Record appropriate epidemiological information related to antiviral recipients.
  - Document antiviral refusals.
  - Monitor antiviral adverse events/side effects.

- Track antiviral use and uptake (use, wastage).
- Monitor antiviral use to control black market impact on supply.
- In partnership with BCCDC, collect and report antiviral drug efficacy and effectiveness in preventing morbidity and mortality.

### *Clinical Health Services*

- ❑ Provide health care services on a priority basis.
- ❑ If medical/health mutual aid system is overwhelmed, request assistance from province but anticipate the assistance from others may be limited.
- ❑ Implement infection control measures.
- ❑ Disseminate surveillance information to surveillance participants within the HA/HSDA.

### *Communications*

- ❑ Respond to media inquiries regarding the outbreak.
- ❑ Participate in surveillance network(s), including data collection and reporting to BCCDC.
- ❑ Provide clear direction to health care providers to ensure continued provision of essential health services.
- ❑ Provide regular, timely information updates about pandemic response to provincial officials.

## **POST-PANDEMIC**

### *Emergency Planning and Response*

- ❑ Demobilize and re-instate facilities for normal health services:
  - Demobilize pandemic influenza-related health care services.
  - Close alternate health care sites.
  - Demobilize police and/or security services at health care facilities.
  - Assess facilities' monetary losses attributable to the influenza pandemic.
  - Clean up facilities and disinfect areas.
  - Project when facilities will be capable of resuming pre-pandemic services.
  - Return facilities to normal functions.
  - Open hospital beds and rebook elective surgeries.
  - Assess and evaluate the impact of the pandemic on health care services at the local level.
  - Evaluate the use of alternate sites.
  - Provide BCCDC with influenza-related epidemiological data as requested.
  - Provide feedback on clinical care guidelines.
  - Participate in situation review.
  - Review facilities' pandemic plan(s), make recommendations for improvement, and support facilities in revising pandemic plan(s).
- ❑ Return equipment to normal use:
  - Dispose of biohazardous waste.
  - Clean and disinfect equipment.
  - Return borrowed equipment.
  - Return stockpiled supplies and/or drugs according to instructions.

- Repair or replace damaged and lost equipment.
- Assess use of supplies.
- ❑ Assess impact on health care workers and facility staff and address staff issues:
  - Demobilize staff and volunteers.
  - Acknowledge the work done during the pandemic by the voluntary organizations and volunteers.
  - Provide a debriefing session immediately after the pandemic has ended.
  - Provide grief counselling to decrease incidence of post traumatic stress syndrome.
  - Offer sabbatical leave for staff requiring immediate relief from duties.
  - Assess staff and volunteer losses due to the influenza pandemic, arrange for lost vacation or sick time to be taken so staff can be revitalized.
  - Reassign staff to former duties.
- ❑ Address and evaluate public impact and needs:
  - Provide grief counselling to decrease incidence of post traumatic stress syndrome.
  - Assess the public's perception of the quality and efficiency of health care delivery during the pandemic.
- ❑ Compile, submit and/or pay bills as appropriate.

### *Vaccines*

- ❑ In partnership with the MHOs, return or dispose of excess vaccine as instructed by BCCDC.

### *Antivirals*

- ❑ In partnership with the MHOs, return or dispose of excess antivirals as instructed by BCCDC.

## APPENDIX G-5: LABORATORIES

### PRE-PANDEMIC

#### *BCCDC Laboratory*

- ❑ Send representative influenza isolates to the National Microbiology Laboratory for strain characterization.
- ❑ Correspond regularly (weekly) with the National Microbiology Laboratory regarding strain characterization results for influenza isolates from BC.
- ❑ Coordinate with other Provincial and Federal laboratories regarding testing information and results.
- ❑ Ensure that all testing laboratories in the province receive regular information regarding circulating influenza subtypes, the best cell lines to use, the usefulness of direct testing, viral susceptibility pattern(s), etc. as received from the National Microbiology Laboratory, the USA CDC or other sources.
- ❑ Establish parameters for testing during annual influenza activity during a pandemic.

#### *All Laboratories*

- ❑ Educate laboratory staff about the necessity of annual influenza vaccination.
- ❑ Evaluate on an on-going basis laboratory procedures which will detect influenza rapidly and with high sensitivity and specificity. For example:
  - evaluate respiratory-mix (MinkLung/A549 cells) for rapid shell vial technique for culture of influenza; and
  - evaluate rapid DFA or point of care methods for same day results.
- ❑ Provide additional training for laboratory workers who may need to perform non-regular tasks during an influenza pandemic.
- ❑ Investigate the availability of other facilities that can help in the laboratory diagnosis of influenza.
- ❑ Participate in regular emergency exercises.

### PANDEMIC

#### *BCCDC Laboratory*

- ❑ Inform BCCDC epidemiologists and all provincial testing laboratories of the first identification of a pandemic influenza strain in BC.
- ❑ Correspond regularly with the National Microbiology Laboratory (NML) regarding antiviral resistance monitoring of influenza isolates from BC.
- ❑ Communicate regularly with the NML regarding appropriate testing and recommended laboratory protocols.
- ❑ Communicate any changes in laboratory protocols to all provincial testing laboratories.
- ❑ Communicate regularly with the NML regarding national and provincial results.

- ❑ Provide BCCDC epidemiologists with influenza testing data as part of ongoing and pandemic influenza surveillance.

### *All Laboratories*

- ❑ Recruit additional laboratory workers if necessary to continue providing influenza testing and other essential laboratory services.
- ❑ Adopt testing recommendations and protocols from the Public Health Agency of Canada regarding influenza laboratory identification.

## **POST-PANDEMIC**

### *All Laboratories*

- ❑ Evaluate overall effectiveness of provincial laboratories' emergency response.
- ❑ Report results of evaluation to provincial laboratories and to the NML.
- ❑ Revise emergency response procedures as needed.
- ❑ Participate in emergency exercises.

## APPENDIX G-6: PHARMACISTS

### PRE-PANDEMIC

#### *Public Education*

- Educate pharmacists regarding pandemic vaccine and antiviral issues (see reference: Preparing for Influenza Pandemics; Canadian Pharmaceutical Journal, April 2000).
- In partnership with BCCDC, the PHO and MOHS, MHOS, HAs and PHNLs, educate the public and physicians about proper antibiotic use to prevent and/or minimize drug resistance, which could directly affect the effectiveness of treatment of influenza complications such as secondary bacterial pneumonia.
- Advocate for public acceptance of influenza vaccination and best use of antibiotics and antivirals.

#### *Vaccines*

- Explore possibility of and requirements to allow pharmacists to deliver influenza vaccine in the event of an influenza pandemic.
- In partnership with BCCDC, assist in developing written information for public education regarding vaccine recommendations, contraindications, dosage and potential vaccine associated adverse events.

#### *Antivirals*

- Participate in decision-making regarding antiviral distribution to the public.
- In partnership with BCCDC, assist in developing educational materials for public education to promote awareness about different antivirals, their indications, contraindications and associated adverse events/side effects.

### PANDEMIC

#### *Vaccines*

- Provide storage for extra vaccine (if available) while maintaining cold chain.
- Provide information to the public regarding times, dates, location of mass immunization clinics.
- Disseminate written materials regarding influenza vaccine (developed provincially).
- If possible and needed, administer influenza vaccine.

#### *Antivirals*

- Distribute written materials regarding antivirals (developed provincially).
- Distribute antivirals to the public.
- Assist in coordinating mass antiviral clinics and distribute antivirals at these clinics.

**POST-PANDEMIC**

*Public Education*

- ❑ Assist in revising and updating materials for public education about pandemic influenza vaccine and antivirals.

## APPENDIX G-7: BC AMBULANCE SERVICE (BCAS)

### PRE-PANDEMIC

- Collaborate with HAs in the development of regional/local pandemic influenza preparedness plans.
- Participate when and where possible in testing and practicing local pandemic influenza preparedness plans.
- Encourage all BCAS paramedics to receive annual influenza vaccination.
- Provide timely information regarding pandemic threat(s) to field staff.
- Consider occupational health issues for staff during a pandemic.
- Establish contingency plans:
  - for replacement of staff who become ill with influenza; and
  - to increase staffing levels to assist with significant increases in ambulance service call volumes.
- Liaise with volunteers to establish additional human resources capacity.
- Consider alternatives to formal or existing ambulances for the transportation of patients.
- Consider prioritization of patients for transport during a pandemic.
- Consider triage of patients during a pandemic.

### PANDEMIC

- Provide BCAS representative(s) to inter-agency emergency operations centre(s) (EOC).
- Liaise with HAs and BedLine to receive information about bed availability in specific communities.
- Activate staffing contingency plans as necessary.
- Monitor capacity to deliver ambulance services within normal operational expectations.
- Facilitate inter-facility patient transfers as required.

### POST-PANDEMIC

- Demobilize operational contingency plans.
- Engage in operational critiques with HAs to determine if plan improvements are necessary.