

APPENDIX A HEALTH AUTHORITY CHECKLIST

Health Authorities are required to return the following checklist every three years to the Provincial Health Officer as administered by the Director, Emergency Management Unit, Ministry of Health.

Ref	Requirement	Complete? (yes or no)	Where is it documented?
	Planning		
1.	Have you prepared a detailed Immunization Response Plan for your Health Authority which aligns with this BC Pandemic Influenza Immunization Response Plan?		
2.	Who signed off on the Health Authority Immunization Response Plan?		
3.	Has your plan been reviewed in the last 12 months?		
4.	Have you tested your plan in the past 12 months? Did the test include scenario planning involving the leaders who will actually be responsible for immunization during a pandemic?		
5.	Have you shared your Health Authority Immunization Response Plan with the Emergency Management Unit, Ministry of Health and other Health Authorities?		
6.	Does your plan enable you to immunize 75% of your region's population within 6 weeks?		
7.	Does your Immunization Response Plan address how your regions response could be scaled? E.g., how the approach would change for mild, moderate or severe pandemics? Or depending on the availability of vaccine?		
8.	Have you educated relevant staff on your Immunization Response Plan?		
	Organization		
9.	Have you defined the governance structures that would be used to oversee your immunization response during a pandemic?		
	Engagement		
10.	Have you involved community vaccine providers in your planning process?		
11.	What number and percent of physicians will be able to deliver the vaccine?		
12.	What number and percent of pharmacists will be able to deliver the vaccine?		

Ref	Requirement	Complete? (yes or no)	Where is it documented?
13.	What number and percent of other private providers will be able to deliver the vaccine?		
14.	What number large businesses will be able to deliver the vaccine to employees, using private immunizers? How many employees would that cover?		
15.	Have you involved First Nations in your planning process?		
16.	How many immunizations will be delivered on reserve?		
17.	Have you involved municipal governments and other public sector organizations in your planning process?		
18.	Have you engaged unions in your planning process?		
19	Does your plan address how you will support target 'seek and immunize' population groups?		
	Vaccine delivery models (mass immunization clinics and community vaccine providers)		
20.	Have you detailed the vaccine delivery models that you will use to immunize your population during a pandemic?		
21.	Does your plan address how you will allocate vaccine amongst vaccine delivery methods, vaccine providers and geographies?		
22.	Do you have documented plans for how you will use community vaccine providers?		
23.	Do you have documented plans for how to set up and run mass immunization clinics?		
24.	Do you have a list of potential venues for mass immunization clinics in your region?		
25	Do you have a list of community vaccine providers in your region?		
	Human Resources		
26.	Do you have detailed human resources plan for staffing during a pandemic?		
27.	Does your plan address how you will source additional vaccine providers (both staff and private sector) during a pandemic?		
28.	Do you have a list of staff in the Health Authority qualified to give vaccinations?		
29.	Have you increased the number of qualified vaccine providers in your region and by how much?		
30.	Have you increased the percentage of healthcare workers who received the latest seasonal influenza vaccine?		
	Vaccine, supplies, logistics and security		

Ref	Requirement	Complete? (yes or no)	Where is it documented?
31.	Does your plan address how you will securely distribute vaccine within your region and to community vaccine providers?		
32.	Can you store enough vaccine for $\frac{1}{4}$ of your population? (maintain cold chain)		
33.	Do you have a stockpile of supplies available to you to immunize your region's population during a pandemic?		
34.	Do you have a system in place which will allow you to report weekly on vaccine inventory levels?		
	Communications		
35.	Do you have initiatives underway to promote seasonal influenza immunization in your region?		
36.	Do you have a pandemic communications plan prepared for your region that addresses internal and external communications?		
	Data collection, recording and reporting		
37.	Do you have processes in place for capturing and reporting adverse events that could be deployed during a pandemic?		
38.	Do you have a process in place for providing weekly reports on vaccines distributed in your region?		
39.	Have you provided clear direction to community vaccine providers on their reporting responsibilities during a pandemic?		

APPENDIX B BCCDC CHECKLIST

BCCDC should complete the following checklist every three years.

Ref	Requirement	Complete? (yes or no)	Where is it documented?
	Planning		
1.	Have you prepared a detailed Immunization Response Plan for the BCCDC which aligns with this BC Pandemic Influenza Immunization Response Plan?		
2.	Who signed off on the BCCDC Immunization Response Plan?		
3.	Has your plan been reviewed in the last 12 months?		
4.	Have you tested your plan in the past 12 months? Did the test include scenario planning involving the leaders who will actually be responsible for immunization during a pandemic?		
5.	Have you shared your BCCDC Immunization Response Plan with the Emergency Management Unit, Ministry of Health and other Health Authorities?		
6.	Does your plan enable you to distribute vaccine for 75% of BC's population to Health Authorities within 6 weeks?		
7.	Does your Immunization Response Plan address how your response could be scaled? E.g., how the approach would change for mild, moderate or severe pandemics? Or depending on the availability of vaccine?		
8.	Have you educated relevant staff on your Immunization Response Plan?		
	Organization		
9.	Have you defined the governance structures that would be used to oversee your immunization response during a pandemic?		
10.	Have you defined how influenza and immunization specialists will be used during a pandemic?		
	Engagement and education		
11.	Have you involved Health Authorities and community vaccine providers in your planning process?		
12.	Have you involved First Nations in your planning process?		
13.	Have you developed, maintained and communicated immunization guidelines across the health sector in BC?		
14.	Have you maintained the Immunize BC website, including updating the flue locator?		

Ref	Requirement	Complete? (yes or no)	Where is it documented?
	Have you shared current knowledge on influenza and vaccination with the health sector in BC?		
	Human Resources		
15.	Do you have detailed human resources plan for staffing during a pandemic?		
16.	Does your plan address how you will source additional staff (both staff and private sector) during a pandemic?		
17.	Have you increased the percentage of qualified vaccine providers in the province and by how much?		
18.	Have you increased the percentage of healthcare workers who received the latest seasonal influenza vaccine?		
	Vaccine, supplies, logistics and security		
19.	Does your plan address how you will securely distribute vaccine around the province?		
20.	Can you store enough vaccine for 1/6 of BC's population? (maintain cold chain)		
21.	Do you have a system in place to collect, analyse and report weekly on vaccine inventory levels?		
	Communications		
22.	Do you have a pandemic communications plan prepared that addresses internal and external communications?		
23.	Does your plan cover how you will communicate vaccine distribution timeframes?		
	Data collection, recording and reporting		
24.	Do you have processes in place for capturing and reporting adverse events that could be deployed during a pandemic?		
25.	Do you have a process in place for providing weekly reports on vaccines distributed in BC?		
26.	Have you determined the mandatory minimum data collection requirements for a pandemic and clearly communicated these to the relevant parties?		

APPENDIX C MINISTRY OF HEALTH CHECKLIST

The Ministry of Health should complete the following checklist every three years.

Ref	Requirement	Complete? (yes or no)	Where is it documented?
	Planning		
1.	Have you reviewed and updated this BC Pandemic Influenza Immunization Response Plan in the last 12 months?		
4.	Have you tested your plan in the past 12 months? Did the test include scenario planning involving the leaders who will actually be responsible for immunization during a pandemic?		
5.	Have you shared the BC Pandemic Influenza Immunization Response Plan with Health Authorities, BCCDC, other provinces and other key stakeholders?		
8.	Have you educated relevant staff on your Immunization Response Plan?		
9	Have you drafted emergency legislation to support a pandemic immunization response?		
	Have you reviewed Health Authority and BCCDC plans to ensure that they are comprehensive and aligned?		
	Organization		
9.	Have you defined the governance structures that would be used to oversee BC's immunization response during a pandemic?		
	Engagement and education		
11.	Have you coordinated with Health Canada around the national response to pandemics and the production of vaccines?		
	Have you involved Health Authorities and community vaccine providers in your planning process?		
12.	Have you involved First Nations in your planning process?		
	Have you coordinated planning with other government agencies, such as the Ministry of Children and Family Development, Ministry of Education and Ministry of Attorney General?		
13.	Have you proactively supported efforts to engage and educate vaccine providers in BC?		
	Human Resources		
15.	Do you have detailed human resources plan for staffing during a pandemic?		
16.	Does your plan address how you will source additional staff (both staff and private sector) during a pandemic?		

Ref	Requirement	Complete? (yes or no)	Where is it documented?
18.	Have you increased the percentage of healthcare workers who received the latest seasonal influenza vaccine?		
	Vaccine, supplies, logistics and security		
19.	Does your plan cover how you will allocate and monitor the fair distribution of vaccine across the province?		
	Communications		
22.	Do you have a pandemic communications plan prepared for BC that addresses internal and external communications?		
	Data collection, recording and reporting		
23.	Do you have processes in place for capturing and reporting adverse events that could be deployed during a pandemic?		
24.	Have you determined the mandatory minimum data collection requirements for a pandemic and clearly communicated these to the relevant parties?		
25.	Does your plan include practical support for Health Authorities, BCCDC, community vaccine providers and others you require to gather data for the Ministry.		

APPENDIX D FUTURE WORK

A. Investigate different options for distributing vaccine:

- (i) Use the pharmacist distribution system in the distribution of vaccine

Pharmacists have an efficient system for distributing drugs, including those that require cold chain, throughout the province. Consider a project to evaluate whether it would be more efficient for vaccines to be given by pharmacists to be delivered through their network. If successful, this could potentially also be used as a distribution network for other vaccine providers.

- (ii) Engage HSSBC and use their facility in Langley and in the interior to speed up repackaging and allow BCCDC staff to concentrate on other activities (such as the allocation of vaccine and supporting Health Authorities with inventory management)

- (iii) BCCDC to support the interior and the north to set up local repackaging operations in order to save time transporting the vaccine to Vancouver and back again.

The plan for distributing vaccines should be developed in combination with the plan for distributing antiviral medications.

B. Have HSSBC maintain the stockpile of supplies for the whole province

HSSBC could maintain the stockpile of supplies needed for a pandemic for the province. They have supply chain expertise, and would be able to distribute the supplies to Health Authorities before the vaccine is developed.

HSSBC will also be able to supply First Nation communities and on-sell supplies to community vaccine providers on a contingency basis if they do not have sufficient stockpile and cannot source supplies from their regular supply delivery models. (Note, pharmacists and physicians will be required to pay for these suppliers as the fee paid to pharmacists and physicians for giving a vaccine includes an allowance for supplies).

This should also provide cost savings due to better economies of scale.

Suggest a working group with representatives from each Health Authority work with HSSBC to detail what should be included in the stockpile.

C. Create a community vaccine provider planning network

Investigate setting up a network of community vaccine providers who are engaged on a part time basis to plan for pandemics with local emergency response planners and encourage others in their professions to get involved.

This could be used as one tool to help address the difficulties currently faced by the Ministry of Health, Health Authorities and BCCDC in estimating the capacity of community vaccine providers to support immunization efforts during a pandemic.

D. Need to increase the vaccine uptake rate of health care workers

The BC population in general needs to be better informed of the importance of immunization in order to increase immunization participation rates. Health care workers are not only an at-risk population, they are also role models for the rest of society. A review is needed to better understand health care

worker reluctance towards immunization. Following this, an education and change management project should be undertaken to increase uptake.

E. Define minimum data collection needs and develop a simple electronic data collection tool

Data collection is currently decentralized, inconsistent and time-consuming, making it difficult to manage during a pandemic. Our understanding is that Panorama may eventually be able to support both Health Authorities and community vaccine providers in data collection. However it may be several years until all the required functionality is rolled out to all vaccine providers.

During the inter-pandemic period, a group of representatives from across the health sector (BCCDC, MOH, each HA, physicians and pharmacists) should agree what the minimum mandatory information needs are. A simple web based system could be sourced or built to capture this information across the province. It could include an interface with PharmaNet, which seems to be reasonably comprehensive. It should also ideally link in with Panorama. Barcoding functionality for each location would help speed up the process.

The system should be backed up with a paper based form for those occasions where computer access is not possible.

F. Plan to mitigate key person risk

There are only a handful of people in BC (and in Canada) with deep and specialist knowledge of pandemic influenzas. These key people will be incredibly valuable during a pandemic. A plan should be developed to outline the role that they will play during a pandemic. The plan should also test whether BC has enough specialists, and it should include a succession plan.

G. Health sector wide coordination of HR planning

The private sector and the public sector will be competing for the same resources during a pandemic. Immunization will be competing with those involved in treating sick patients for resources as well. There is a need for a tactical plan for how HR coordination will work in practice across the health sector.

H. Define severe, moderate and mild pandemic

This standard terminology does not have an agreed upon definition. Once agreed, this plan should be updated to reflect the definition.

I. Adopt a coordinated provincial approach (Ministry + Health Authority) to engaging unions in the planning process