

# Consultation Regarding Addressing Immediate Needs of Surge Capacity of Pandemic Equipment, Supplies and Pharmaceuticals

**REVISED DRAFT REPORT** 

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Public Health Agency of Canada

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## 1. INTRODUCTION AND METHODOLOGY

The Government of Canada and the provinces and territories each maintain emergency stockpile reserves necessary to support the expected surge capacity requirements from the potential H1N1 pandemic, starting in the fall of 2009. The role of the Public Health Agency of Canada (PHAC) National Emergency Stockpile System (NESS) is to provide surge material, equipment and supplies to provinces and territories in times of health crisis when the jurisdictions' own surge capacities have been depleted. Each jurisdiction, however, does not maintain their materials management systems (i.e., stock lists of equipment, supplies and pharmaceuticals) in the same way with regard to logging, tracking, warehousing and distribution of stockpiles. In order for PHAC to be of the greatest utility in supporting the provinces and territories in terms of their surge demand, it must first resolve what the provinces and territories have, will have by the fall of 2009, and their likely needs to meet their population demand requirements. Although First Nations communities lie within the provinces and territories, the First Nations and Inuit Health Branch (FNIHB) was included in the assessment of surge capacity material, equipment and pharmaceuticals as it has the responsibility to supply personal protective equipment (PPE) to healthcare workers providing/assisting in the delivery of health care services in First Nations communities across the country. This resulting identification of current stocks and needs will assist the federal government in shaping its own priorities for the National Emergency Stockpile System (NESS) and in the identification of opportunities for collaboration to address identified needs. In order to do this, a comprehensive inventory of all pandemic surge supplies, equipment and pharmaceuticals (kept outside of the National Antiviral Stockpile - NAS) is required for all provinces and territories. This will ultimately create a unified picture of the demand and needs across the country and the extent to which these needs are consistent across all jurisdictions, or isolated to individual provinces/territories. This in turn has implications for the priorities for NESS and possible opportunities for collaborations to address the needs across the jurisdictions. In addition to this is a need to understand how the 13 jurisdictions and FNIHB wish to interface with the federal government and NESS in requesting support and the allocation of NESS in the broader scheme of meeting the pandemic demand.

The current study involves the collation of a full, relevant comprehensive inventory of surge capacity stockpile list across the 13 provinces and territories, along with FNIHB. This information is meant to be used to identify the priorities in supplies for NESS, but also in the process of how NESS can be called on by each jurisdiction to support the surge requirements of each. The resulting inventory product can also be used across jurisdictions and FNIHB to explore the potential for individual provinces, territories and FNIHB assisting each other through trading and loaning of supplies, thereby evening out the materials required to meet the surge demand for the country as a whole.

It is understood that, with the peak demand for H1N1 pandemic response is likely to occur over late October through December of 2009, therefore the current work is under significant time constraints. The intent was to have the reporting from this work and resulting national inventory completed and available by sometime in September, however, it was difficult even in July and August to obtain responses from all jurisdictions and so collection was drawn out to September. This resulted in a follow up that only occurred in October, and ultimately was not completed as many jurisdictions were no longer able to commit any resources whatsoever to this exercise once the second wave of the pandemic hit in Canada.

The original Action Request from the Pandemic Preparedness Health Operations Coordination Working Group (PPHOC) to collect information on pandemic influenza surge capacity for equipment, supplies and pharmaceuticals was sent out by email on July 10 2009. Responses to this email were received over a period of July and August. A follow-up set of questions was designed to be completed on line. Invitations to complete this survey were sent out on Oct 20 2009, and responses were received up to November 10. Reporting took place over November.

Following is an indication of res	sponses received fro	om each of the 13	jurisdictions a	and for and
for the First Nations and Inuit Health Branch (	(FNIHB) for the initia	I and follow-up col	llections.	

	Reply to first PSPWG survey	Responded to follow-up survey
British Columbia	X	x
Alberta	x	x
Saskatchewan	x	
Manitoba	x	x
Ontario	x	
Quebec	x	
New Brunswick	X	
Nova Scotia	x	
Prince Edward Island	x	
Newfoundland		x
Nunavut		x
Northwest Territories	x	x
Yukon	X	
First Nations and Inuit Health Branch	X	x

# 2. Results

The collection resulted in a detailed inventory of almost 900 items of pandemic equipment and supplies that 13 jurisdictions had on hand or on order in the fall of 2090. This list was then summarized into 25 categories of items that the jurisdictions either had or were expecting in the near future. Pooling the list together across the 13 jurisdictions creates a snapshot of what they have collectively across the country. The first table below provides the supplies and equipment across the individual jurisdictions.

The second table provides the rolled up inventory for all jurisdictions across the country. This list is ordered by the magnitude of responses (in term so f number of jurisdictions reporting inventory). As shown, gowns, masks, gloves, sanitizer, goggles and syringes are the items reported by most jurisdictions. Combining the inventory listed as "on hand" at the time of reporting with items that had been ordered (which presumably were received shortly afterwards), the item with the highest inventory count was masks, followed by gloves at 203.4 and 159.7 million articles, respectively. This same summary table indicates the items currently held in stock by NESS, as well as those items received by NESS. As shown in the table, there are 16.1 million masks held at NESSS (the item with the second highest inventory count after vaccine at 23.8 million doses). While a considerable number of masks, this is a fraction of the inventory held by the 13 jurisdictions collectively. The third largest inventory count held by NESS is on gloves, at 4 million pairs, which again is a small number compared with the count held by the 13 jurisdictions. In the case of each of the ten types of items held by NESS, the inventory held by the jurisdictions collectively is considerably larger, with the exception of the vaccine (which had not yet seen mass distribution to the provinces at the time the jurisdictions provided their reports in the fall). Some of the stockpile assembled by the jurisdictions seem quite high (e.g., 203 million masks and 160 million pairs of gloves).

Examining the list of items that the jurisdictions received from NESS, this list of six items also represents a small fraction of what the jurisdictions collectively have purchased/received, again, with the exception of vaccine. IN the case of gloves, for example, although the second most supplied supply from the NESS stock sent out, it represents less than one per cent of the inventory amassed by the jurisdictions. Ventilators, however, raises some interesting questions as the records held by NESS of what it supplied to the jurisdictions is considerably higher than the numbers reported by the jurisdictions themselves at 102 (compared with the 370 supplied, according to NESS). It should be noted, however, that there is a disparity in the timelines of reporting, given that jurisdictions provided a snapshot of their own inventory over the course of July through August (with some level of validation in October) and the NESS reporting is as of the end of 2009.

In addition to the 6 types of items reported by virtually all jurisdictions there were 7 types of items reported by about a third to half of the jurisdictions and 11 types of items reported by only one to three jurisdictions.

	BC		Alberta		Saskatchewan		Manitoba	Ontario		Quebec New B		unswick
	On		On		On		On	On		On	On	
	hand	Ordered	hand	Ordered	hand	Ordered	hand	hand	Ordered	hand	hand	Ordered
band aid/dressing	11,020	80	3,892,405	0	0	0	0	25,000,000	0	0	0	1,422,000
cannula	8,945	3,600	419,447	0	0	0	0	0	0	0	0	0
catheter	10,150	992	0	0	0	0	0	0	0	0	2,195	0
Gauze pads			604,300									
gloves	1,117,850	71,500	20,909,310	0	0	14,600,000	730,000	21,000,000	0	56,710,235	7,501,500	8,441,800
goggles/glasses	2,297	8,890	2,512,795	249,600	0	13,000	1,000,000	0	0	2,420,525	664,000	64,000
gowns	8,466	21,277	5,547,247	0	0	200,000	1,800,000	20,000,000	0	2,000,000	1,526,000	2,467,000
inhalers												
IV equipment	87,160	400	330,137	0	0	0	0	0	0	0	0	0
IV solution	1,384,809	26,144	880,788	0	0	0	0	0	0	0	156,336	0
masks	92,141	268,884	25,343,041	1,500,000	500,000	5,500,000	30,000,000	83,000,000	6,000,000	12,696,080	10,675,582	0
needles	0	0	976,578	0	0	0	0	0	0	3,528,833	0	1,971,012
oxygen equipment	0	0	44,255	0	0	0	0	0	0	629	0	0
regulators												
respichamber	0	0	0	0	0	0	0	0	0	239,080	39,733	0
respirators/consumables												
sanitizer	1,225,804	57,925	11,731,790	0	0	125,000	13,500	25,010,000	1,000,000	64,618	502,084	9,011,226
sharps containers	21,963	6,214	32,480	0	0	0	0	0	0	32,219	0	15,040
sphygmomanometer	0	0	0	0	0	0	0	0	0	10,320	0	0
stethoscopes	20	0	25	0	0	0	0	0	0	800	336	0
syringe	2,063,305	60,000	2,969,128	9,000,000	0	3,000,000	0	0	0	17,261,233	0	1,504,012
thermometers/temp monitors	1,756	800	0	0	0	0	0	0	0	12,303	143,638	0
tourniquet	2,000	400	8,116,425	0	0	0	0	0	0	0	0	0
vaccine	0	0	0	0	0	0	0	3,839,465	0	0	0	0
ventilators/ventilator requirements						3						

#### TABLE: Summary of Pandemic Surge Capacity Supplies and Equipment List

	Nova	Scotia	PE	EI	Newfou	ndland		NWT		Yukon		Nunavut		FNHIB (employees only)	
	On		On		On		On	On		On		On		On	
	hand	Ordered	hand	Ordered	hand	Required	hand	hand*	Ordered	hand	Ordered	hand	Ordered	hand	Ordered
band aid/dressing	0	4,300,000	0	0	825,000	253,400	0	0	0	0	0	0	0	0	0
cannula	0	0	0	0	436	11,664	0	0	0	0	0	0	0	0	0
catheter	0	0	0	0	1,825		0	0	0	0	0	0	0	0	0
Gauze pads		2,150,000													
gloves	0	0	0	550,000	17,792,524	917,400	419,163	612,000	614,000	453,169	0	0	0	0	8,200,000
goggles/glasses	0	0	0	8,000	91,166	1,106,362	812	310	550	49	0	0	0	0	2,000,000
gowns	0	35,000	10,000	0	744,905	259,350	11,360	20,000	20,000	19,800	0	0	0	0	1,300,000
inhalers															
IV equipment	0	0	0	0			0	0	0	0	0	0	0	0	0
IV solution	0	0	0	0	6,953	72,151	0	0	0	0	0	0	0	0	0
masks	14,380,000	1,000,000	1,445,800	250,000	1,204,016	291,400	25,500	91,800	398,160	46,121	10,000	0	0	0	9,000,000
needles	0	186,000	0	0	1,177,300	26,400	0	80,000	0	0	0	0	0	0	0
oxygen equipment	0	0	0	0			0	0	0	30	0	0	0	0	0
regulators						355									
respichamber	0	0	0	0			0	0	0	0	0	0	0	0	0
respirators/consumables					591,138	433,465									
sanitizer	250	2,163,000	0	0	875,921	530,648	85	500	600	218	0	0	0	0	352,000
sharps containers	0	7,000	0	0	10,806	204	0	1,000	0	0	0	0	0	0	0
sphygmomanometer	0	0	0	0			0	0	0	0	0	0	0	0	0
stethoscopes	0	0	0	0			0	0	0	0	0	0	0	0	0
syringe	0	2,100,000	259,200	0	1,495,000	602,500	0	160,000	0	30,545	0	0	0	0	0
thermometers/temp monitors	0	0	0	0	12,000	36,000	0	0	0	0	0	0	0	0	0
tourniquet	0	0	0	0			0	0	0	0	0	0	0	0	0
vaccine	0	0	0	0			10,615	14,083	133,965	0	0	0	0	0	0
ventilators/ventilator requirements		50		26	14	180		3		4	2				

\* on hand in health centres

							NESS Current
	On Hand	Ordered	Both (combined)	Required (1)	n of Provinces reporting	Received by NESS	Stock as at 21 Dec 2009
gowns	31,687,778	4,043,277	35,731,055	259,350	13		178,741
masks	179,500,081	23,927,044	203,427,125	291,400	13	1,970,320	16,106,525
gloves	127,245,751	32,477,300	159,723,051	917,400	12	460,000	4,010,306
sanitizer	39,424,770	12,709,751	52,134,521	530,648	12	5,592	8,700
goggles/glasses	6,691,954	2,344,040	9,035,994	1,106,362	11		929,666
syringe	24,238,411	15,664,012	39,902,423	602,500	10		2,000,000
sharps containers	98,468	28,254	126,722	204	7		
band aid/dressing	29,728,425	5,722,080	35,450,505	253,400	6		
needles	5,762,711	2,157,012	7,919,723	26,400	6	30,000	100,000
ventilators/ventilator requirements	21	81	102	180	6	370	550
thermometers/temp monitors	169,697	800	170,497	2,036,000	5		
IV solution	2,428,886	26,144	2,455,030	72,151	4		100,000
stethoscopes	1,181	0	1,181	0	4		
cannula	428,828	3,600	432,428	11,664	3		
catheter	14,170	992	15,162	0	3		
oxygen equipment	44,914	0	44,914	0	3		
Gauze pads	604,300	2,150,000	2,754,300	0	2		
IV equipment	417,297	400	417,697	0	2		
respichamber	278,813	0	278,813	0	2		
tourniquet	8,118,425	400	8,118,825	0	2		
vaccine	3,864,163	133,965	3,998,128	0	2	1,998,050	23,786,160
regulators	0	0	0	355	1		
respirators/consumables	591,138	0	591,138	433,465	1		
sphygmomanometer	10,320	0	10,320	0	1		

#### TABLE: Summary List of Inventory for All Jurisdictions

# 3. OVERALL OBSERVATIONS

The following observations can be made about the information submitted:

- Considerable effort was required to obtain the information reported by the 13 jurisdictions. All were heavily involved in pandemic planning and response efforts and resources to provide the reported information were scarce.
- There is considerable variation in the level of detail provided by individual jurisdictions. Some reported only 5 or 6 types of items, where others reported 40 to 60, and one jurisdiction reported almost 300 items. This was likely related to two factors: confusion between this exercise and a separate planning effort that was also taking place over the same time period, which required the reporting of 12 core types of pandemic supplies; and the scarcity of resources at a time when planning and response were at their height.
- Most jurisdictions were reporting what they had on hand at the point of collection (in July and August). Relatively few reported that they had items on order (that they had yet to receive), although there were 3-4 jurisdictions with a few types of items on order and PEI had about half of their reported items on order. So, most supplies were in place a few months before the second wave of the pandemic hit in the fall.
- By October, only 1 or 2 indicated not having on hand everything they had ordered. Additional masks, syringes, sanitizer and ventilators were the items still on order that had yet to be received and only 1 jurisdiction was uncertain about whether they would receive these items by the end of October.
- The four jurisdictions reporting this information indicated that they had used the standard assumptions for Pandemic Planning for the Health Sector. One jurisdiction added some additional elements related to a more spread out and rural population. Jurisdictions reporting the information generally said that they assumed coverage of the entire population. In two cases, this did not include the coverage of military.
- About half of jurisdictions indicated some form of MOU or contingency plan to obtain additional supplies from adjacent jurisdictions if the need arose, although each was unsure of the other jurisdictions' ability to assist at the height of the pandemic.
- Ventilators, needles and syringes were considered the top priority items on the list. Only two jurisdictions specifically said that they might be relying on NESS (New Brunswick and Manitoba) for back up in the even that they needed assistance and neither one specified particular items that they anticipated would run short. This is particularly interesting given the disparity in reporting of inventory fro the jurisdictions and what NESS reports sending out. That

said, there is a large disparity in the reporting timelines, with jurisdictions reporting through July to October and the NESS list taken late in 2009.

- It is interesting to note that some of the pandemic supplies assembled collectively by the jurisdictions (and in some jurisdictions in particular) seem quite high (relative to the size of the Canadian population). This may point to some possible over-ordering ort duplication of ordering of pandemic supplies. This may have occurred if time constraints to get orders in were tight and coordination was not at optimal levels given overtaxed resources and short timelines.
- The data comprehensiveness was limited in some areas. Many jurisdictions only provided a summary type of reporting of items they had or needed. Many did not provide details regarding the coverage of populations, or information about assumptions used. In two cases, items were reported as potentially not coming in by the end of October in the follow-up, even though they were not reported as being on order or required in the first consultation. Similarly, in another jurisdiction several items were reported as priority items, even though they were not indicated as items on order or required.
- In spite of the validation process put in place in the collection exercise, the quality of data reported suggests that there were likely some reporting challenges. This may again be due to resources constraints to respond. It may have been that different groups were responsible for addressing different sections of the inventory list and coordination was an issue.

Overall, the recommendation for future collection of this type of information would be to plan for a first brief consultation with a senior representative in each jurisdiction, followed by a hand off of the detailed reporting requirements to someone else in the jurisdiction. The detailed submission should be followed by a consultation with the jurisdiction to obtain the more contextual information around the reporting of inventory. This should be followed by a second follow-up later in the timeline to ensure that any supplies and equipment that were on order have come in, and that no new supplies are required or on order. This series of 2-3 short consultations of 10 minutes each taking place by telephone would be the best way to ensure that all information is collected and that any data quality issues can be resolved.

In terms of next steps, additional consultation with the 13 jurisdictions and FNIHB is recommended now that the pandemic urgency has passed, in order to fully assess how accurate the planning of surge capacity was by jurisdictions, against the actual unfolding of need for equipment and supplies. Identification of the greatest sources of inaccuracy (and why) would be central to the discussion. Based on this post-event assessment, respondents would also be in a good position to comment on how and where they would change their planning strategy (if they would) in planning for future events.

## APPENDIX A PROVINCIAL SUMMARIES

#### **PROVINCIAL SUMMARIES**

Following are summaries of key results by jurisdiction, along with a summary table of all surge capacity supplies and equipment reported by jurisdiction. The level of detail of items reported is described by types of items (e.g., a specific type of needle or gown). Broad categories of types of items are also listed (i.e., all sizes of syringes are rolled into the broad category of syringes).

#### MANITOBA

- Only 6 types of items reported in 5 broad categories (masks, gloves, goggles, gowns, sanitizer). All items on hand. Nothing on order or required, according to initial spreadsheet.
- According to additional responses in first survey, Manitoba's planning assumed coverage of entire population, and assumes a 35 per cent attack rate over an 8 week period (as per 1918 style pandemic wave). Overall, assumes 350,000 medical encounters.
- There is a supply chain analysis underway and some additional funds set aside in case additional supplies are required.
- MOU's in place with neighbouring jurisdictions if there is an unforeseen urgent requirement. It is assumed that NESS may be able to provide back up in the event of emergency needs.
- In the follow-up Manitoba confirmed that the investigation had captured the right number and type of supplies on hand and that there were no additional requirements. They also confirmed that all ordered supplies have been received and that they have used the standard assumptions outlined in the Canadian Pandemic Influenza Plan.

#### QUEBEC

- 40 types of items were reported on in the initial spreadsheet; all were types of items that the province had on hand by September 30, 2009. These included items in 13 broad categories (gloves, goggles, gowns, masks, needles, sanitizer, oxygen equipment, respichamber, sharps containers, sphygmomanometer, stethoscopes, syringes and thermometers). No items were reported to be on order at that time.
- > No additional information was provided beyond this list.
- > No response was provided to the follow-up.

#### **ONTARIO**

- 12 types of items were reported to be on hand. In terms of broad categories these were: band aids, gloves, gowns, masks and sanitizer, as well as vaccine. It is interesting to note that only Ontario and Northwest Territories indicated that they had on hand or had ordered any vaccine. The Ontario initial response of supplies list was submitted on August 12.
- Two additional types of items were on order but had not been received at that point (masks and sanitizer).
- Local and regional health authorities were reported to be involved in the planning process.
- No military personnel were considered in the planning figures. They are considered to represent less than one per cent of the population.
- Concern was expressed in the initial reporting about availability of ventilators. These were seen as an urgent priority and the federal government was asked for details about potential NESS assistance regarding ventilators and emergency supply/purchase of needles and syringes.
- In general ventilators, needles and syringes were considered top priorities in terms of requirements, while goggles, sharps container and disposable thermometers were considered less important.
- Ontario did not include needles, ventilators, goggles or sharps containers in their pandemic surge supplies list.
- > No response was provided to the follow-up.

#### ALBERTA

- 57 types of items were reported to be on hand. These fell into the 16 broad categories of band aids, cannula, gauze pads, gloves, goggles, gowns, inhalers, IV equipment and solution, masks, needles, oxygen equipment, sanitizer, sharps needles, stethoscopes, syringes and tourniquets).
- Only 3 types of items on order (more goggles, more masks and more syringes).
- Alberta confirmed in the follow-up that this represented an accurate snapshot of supplies that they had or were to receive by end of October. They indicated that they did not know if they would receive the ventilator that they had ordered by end of October.
- > In their pandemic surge supplies list the province did not include ventilators.

- > No additional information was provided beyond this list in the initial submission.
- They confirmed in the follow-up that they had used the standard assumptions in the outlined in the Canadian Pandemic Influenza Plan.

#### SASKATCHEWAN

- 10 types of items were reported, each of which were on order. This included 6 broad categories of gloves, goggles, gowns, masks, sanitizer, and syringes. The reported having some masks already on hand.
- The 12 regional health authorities (RHA) of Saskatchewan were responsible for creating their own surge capacity needs list for the pandemic for their own populations.
- > The purchase was to be through the Saskatchewan Association of Health Organizations.
- The planning was based on the assumption of 25 per cent attack rate in the population over an 8 week period, or 50,000 cases in the ER/clinics.
  - Saskatchewan has 12(13) RHA who would have the responsibility of creating their own surge capacity for a pandemic response for their covered population (which theoretically could include anyone and everyone living within that RHA).
  - As a rule, the stockpile purchases related to pandemic surge capacity have been managed through Saskatchewan Association of Health Organizations (SAHO)
  - There is recognition that although RHA are creating their surge capacity to respond to a pandemic, a number of private or affiliated companies within these RHAs have also purchased some of their own material (i.e. N95 masks) through independent purchases and it is unclear as to how these materials will be accessed should a pandemic hit. This independent purchasing may have also occurred at a municipal level.
- > No response was provided to the follow-up.

### NOVA SCOTIA

- 27 types of items were reported to be on order under nine broad categories (band aids, masks, gowns, sanitizer, needles, gauze pads, sharps containers, syringes, and ventilators), along with 3 that were on hand (more masks and more sanitizer).
- All population was covered in any assumptions generated. The province has hired a consultant to assist with planning.
  - Infectious Control Supplies for Continuing Care and Department of Community Services Nova Scotia is presently working with a consultant (Gardner and Pinfold) regarding a Strategic Reserves project (this began approx 8 months ago and the final report will be ready to go to Nova Scotia Cabinet by mid September. The consultant was engaged to work with members of each of these sectors, to come up with a list of supplies which would be provided related to the pandemic
- > No response was provided to the follow-up.

#### PRINCE EDWARD ISLAND

- The province only reported 5 types of items that it already had on hand in the three broad categories of gowns, masks and syringes.
- Another 4 types of items were on order in four categories (gloves, more masks, goggles and ventilators).
- > No additional information was provided beyond this list.
- > No response was provided to the follow-up.

#### NEW BRUNSWICK

- The province reported on 53 types of items that they had on hand under ten broad categories (catheter, gloves, goggles, gowns, IV solution, masks, respichambers, sanitizer, stethoscopes and thermometers).
- They also indicated 16 types of items that they had ordered in eight categories (band aid/dressings, more gloves, more goggles, more gowns, needles, more sanitizer, sharps containers, and syringes).

- They also indicated that they were not expecting to have any further requirements for the fall of 2009. That said, they expected that NESS would be there for contingencies, particularly given that other provinces would likely be unable to assist at that time.
  - NESS, if required but we have provided for some contingency in what we've ordered. Mutual Aid MOU many be required however, we're realistic in knowing that other P/Ts will not likely be in a position to province us with resources or aid during a pandemic outbreak.
- The supplies are considered to cover all of the regional health authorities, as well as the needs of the First Nation health clinics.

### **FNIHB**

- Eleven types of items were reported to be on order under five broad categories (gowns, gloves, goggles, masks and sanitizer).
- This was anticipated to be sufficient, but ongoing assessment is in place to determine the likelihood of gaps and help to identify additional need if and when it arises.
- FNIHB's stockpile is ONLY intended for health care workers and workers providing and/or assisting in the provision of health care services to on-reserve First Nations communities.
  - Health care workers in First Nations communities do not necessarily have the same employer. They can be federal employees, band employees or agency employees (hired directly by the community), and may work together in the same communities and, in some situations, may work alongside provincially-employed health care employees. For that reason, FNIHB will also provide supplies to band and/or agency employees.
- In the follow-up they added:
  - FNIHB is responsible for providing PPE supplies to healthcare workers providing/assisting in the delivery of health care services in First Nations communities in 7 FNIHB Regions. The delivery of health care services varies between and among FNIHB Regions; therefore, FNIHB Regions are encouraged to follow provincial guidelines/recommendations regarding infection prevention and control practices, including the use of PPE. For that reason, the amounts of PPE were determined based on national/provincial assumptions. We are using some of these assumptions; however, based on data from the first wave and the demographics of our population, FNIHB is considering the assumptions for a more severe scenario.

Health Canada, the First Nations and Inuit Health Branch (FNIHB), is responsible for providing PPE, including respirators, masks, faceshields, gowns, gloves, and hand sanitizers to health care providers providing health services in First Nations communities. As per article 125, part II of the Canada Labour Code, employers are responsible for the health and safety of their employees. As Health Canada (HC) employs front-line health care provider in many First Nations communities, the Canada Labour Code applies. Part II of the Code, section 124, states that "every employer shall ensure that the health and safety of every person employed by the employer is protected." Health Canada is responsible for providing PPE to designated and non-designated healthcare providers, which includes spiritual care providers, providing and/or assisting in the delivery of health care services in health facilities and/or selected community settings, in both transferred and non-transferred communities, to suspected or known H1N1 infected patients.

### BRITISH COLUMBIA (BC)

- 200 types of items reported on hand under 15 broad categories of items, and 89 types of items on order under 14 of the same broad categories (see Summary Table of Items). The six BC Health Authorities reported separately.
- > BC reported the populations covered within Health Authorities:
  - "The ministry used the logistics estimating tool developed by Fraser Health Authority (FHA) which they have used for the past couple of years. We requested FHA engage its consultant (Oliver Zihlmann from Global Consulting) to repurpose / generalize the tool for use by all of the health authorities (HA).
  - Once the tool was adjusted, Global ran it for each HA using their population statistics, etc. The results were then refined and adjusted by each HA to reflect any unique circumstances.
- In the follow-up survey, BC confirmed the accuracy of the pandemic supplies list, but that since the September 30 deadline of the original survey, further items would be required that were not included in the original list. BC was unsure of what these items would be.
- In the follow-up survey, they indicated they are unsure of whether they will receive all the supplies on order by the end of October.

### NUNAVUT

- Nunavut did not provide a detailed list of pandemic supplies on hand/ordered. In the follow-up survey, Nunavut indicated that this was due to a lack of staff capacity.
- > No populations will be excluded from Nunavut's calculations of surge requirements.
- They indicated that: "Capacity is our largest issue, followed a close second by the issues related to the reliance of Nunavut on other jurisdictions for ICU and Ventilator and other support for clinical care of cases."

## NORTHWEST TERRITORIES

- 31 types of items were reported to be on hand (with 10 on hand in the health centres). These are across 6 broad categories (gloves, goggles, gowns, masks, needles, sharps containers, sanitizer, vaccine and ventilators).
- There are also 17 types of items on order across 6 categories (gloves, goggles, gowns, masks, sanitizer, and vaccine).
- Are working with the Pandemic Supplies Procurement Working Group for portable ventilators, syringes and needles
- Military not included in estimations of needs, but the Royal Canadian Mounted Police is included.
- Follow-up survey indicates the original items report is accurate, no further items are needed, and they expect all orders will be received by end of October. They confirmed that they followed the standard assumptions for estimating needs.

## YUKON

- 17 types of items were reported to be on hand across 6 categories (gloves, goggles, gowns, masks, oxygen equipment, sanitizer, syringes and ventilators). There are also 2 more types of items on order (more masks and more ventilators).
- Strategies to address urgent needs: "Yukon government does not have an established stockpile to draw from so if our surge requirements exceed our ability to quickly replenish our inventory then we will be contacting the NESS for support."

- Only Yukon and Ontario indicated vaccine as something that they had on hand or on order (the Yukon the initial supplies list was sent on August 10).
- Population used for estimates include federal populations, RCMP, DND, etc. First Nations populations not included.
- > Did not complete follow-up survey.

APPENDIX B PRIMARY COLLECTION INSTRUMENT

#### Friday July 10, 2009

Dear PPHOC Members,

In follow up to the last PPHOC teleconference of June 18<sup>th</sup>, we are now collecting information on pandemic influenza surge capacity for equipment, supplies and pharmaceuticals (outside of the National Antiviral Stockpile [NAS]) from all provinces, territories and First Nations where stockpiling occurs separately.

The information collected and analyzed in this first phase of the Strategic Reserve Project will support decision making for additional procurements and allocation across the provinces and territories as we get ready for the possible H1N1 resurgence in fall 2009.

It would be greatly appreciated if you could submit the following information:

- 1. What items do you have in your stockpile?
  - a. Equipment, supplies, pharmaceuticals (outside of NAS) relevant to pandemic influenza preparedness
- 2. What quantities of these items do you currently have in your stockpile?
- 3. What additional items and/or quantities of above mentioned items do you anticipate having by fall 2009?
- 4. Are there items and/or quantities that you will require beyond what you will have by fall 2009? (Please specify the date you are targeting to be fully ramped up)
  - a. What are they and how much more would necessary?
  - b. Rate the urgency of addressing each item using the rating of 1 to 3 (1=urgent, 2=important, 3=lower priority)?
  - c. What strategies are you considering to address urgent or important needs (e.g. federal procurement, MOU, etc.)

For all of your surge capacity for pandemic influenza preparedness:

- 1. Please provide the rationale for your identified requirements in preparing surge capacity for pandemic influenza (items and quantities).
  - a. What level of authority (i.e. provincial/territorial, regional, local) was included in compiling these items/quantities
  - b. Are there levels of authority that exist in your jurisdiction that were not included? If yes, please specify.
- 2. Please indicate all populations (e.g. military, correctional services) that you are NOT including in your rationale/calculations.
  - a. What % or number of your provincial/territorial population does this represent

During our last teleconference, it was decided that the information would be provided by the members in the format currently used within their own jurisdiction. The amalgamation of the listed items provided will be done at the national level. However, in order to facilitate data manipulation, please provide electronic spread sheets.

Responses are to be forwarded to: PPHOC Secretariat by July 24. Should you need any clarification, do not hesitate to contact:

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Sincerely

Susan Kessler, PPHOC Provincial Co-Chair Anne-Marie St-Laurent, PPHOC Federal Co-Chair