

Provincial Emergency Blood Management Committee

**Final Report of the
Unannounced Blood Shortage
Simulation Exercise
August 21, 2014**

Department of Health
September 19, 2014

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Abbreviations:

PEBMC: Provincial Emergency Blood Management Committee

BEMP: Blood Emergency Management Plans

CBS: Canadian Blood Services

EBMC: Emergency Blood Management Committee

TM: Transfusion Medicine

NAC: National Advisory Committee on Blood and Blood Products

DoH: Department of Health

BSAG: Blood System Advisory Group

RHA: Regional Health Authorities

Executive summary:

In 2010 The New Brunswick Department of Health (DoH) in collaboration with the New Brunswick Blood System Advisory Group (BSAG) and endorsed by the Provincial Emergency Blood Management Committee (PEBMC), developed the New Brunswick Blood Shortages Management Plan which aligns with the National Plan for the Management of Shortages of Labile Blood Components (the Plan).

The purpose of the NB Blood Shortage Management plan is to maximize the effectiveness of a provincial response to a crisis that impacts the blood supply in New Brunswick by providing a framework to ensure a consistent, coordinated response within the province and is to be used to provide guidance to New Brunswick's Regional Health Authorities (RHA) to enable the respective facilities to develop their Blood Emergency Management plans (BEMP).

The NB Blood Shortage Management plan is an evolving document which will be amended as necessary. The Plan was revised in January 2012 and in alignment with this the NB Blood Shortages Management Plan was also updated.

Revisions to the NB Blood Shortage Management Plan were approved by the PEBMC and a decision to hold an announced simulation, followed by an unannounced simulation within 6 months, was made at a meeting held on February 7, 2014.

On August 21, 2014 an unannounced blood shortage simulation was held in conjunction with CBS to test the New Brunswick Blood Shortage Management Plan: Version 2.0 and its integration with Regional/ Zone/Hospital BEMPs.

The objectives of the NB Emergency Blood Management unannounced simulation exercise were:

- To increase awareness of the possibility of a blood shortage.
- To ensure hospitals are aware of their Blood Emergency Management Plans.
- To gauge the TM Laboratories preparedness for a blood shortage.
- To test communications during a shortage.

This unannounced simulation exercise demonstrated an increased engagement from TM Labs in the Province and indicated that it positively impacted their emergency preparedness in the event of a blood shortage although there is still some education required in some zones. It also underlines the need for frequent review and exercises to maintain familiarity with the plan.

There was an increased level of participation from the TM Labs during this simulation but a smaller rate of participation on the PEBMC teleconference by the RHA.

This report includes a summary of the findings and comparison with the announced simulation which took place April 16, 2014.

Background:

The Provincial Emergency Blood Management Committee (PEBMC), with representation from senior management of both regional health authorities as well as from the Department of Health (DoH) and Canadian Blood Services (CBS), was formed as a result of the development of the National Plan for the Management of Shortages of Labile Blood Components (the Plan) by the National Advisory Committee (NAC) on Blood Products in partnership with CBS. The Plan was first implemented in late 2009 to provide the framework to optimally manage the distribution and use of blood products in times of shortage.

In 2010 the New Brunswick Department of Health in collaboration with the New Brunswick Blood System Advisory Group (BSAG) developed an Emergency Blood Shortages Management Plan which aligned with the Plan and was to be used to provide guidance to New Brunswick's Regional Health Authorities (RHA) to enable the respective facilities to develop their Blood Emergency Management plans (BEMP)

The purpose of the NB Blood Shortage Management plan is to maximize the effectiveness of a provincial response to a crisis that affects the adequacy of the blood supply in New Brunswick by providing a framework to ensure a consistent, coordinated response within the province.

On April 27, 2011 a simulation exercise was held to test the communication portion of the NB Blood Shortage Management plan, to identify gaps and to reinforce the need for Regional/Zone/Hospital BEMPs.

On August 23, 2011 an unannounced simulation was held to test the Regional/Zone/Hospital BEMPs that had been developed in alignment with the NB Blood Shortage Management Plan. In response to lessons learned from the April simulation, TM labs were phoned as a follow-up to the Fax and acknowledgement of receipt pages were forwarded to CBS.

The NB Blood Shortage Management plan, just like the Plan are living documents which need to be reviewed after each simulation, real shortage event or after revisions to the Plan. The Plan was revised in January 2012 and in alignment with this the NB Blood Shortage Plan was reviewed and revised to align with the changes as well as recommendations from previous simulations. The revised plan version 2.0 was distributed to the PEBMC for filtering down to their respective Health Regions to be aligned with their Regional/Zone/Hospital BEMPs in March 2014.

On April 16, 2014 a planned blood shortage simulation was held in conjunction with CBS to test the New Brunswick Blood Shortage Management Plan: *Version 2.0* and its integration with Regional/Zone/Hospital BEMPs.

Recommendations from April 16, 2014

1. The PEBMC to discuss options on a plan to ensure all stakeholders receive the documentation in the future. *(To be discussed at PEBMC meeting Oct 17, 2014)*

2. The DoH to use a fax machine that has less traffic to avoid busy signals (*Different Fax used*)
3. Regional/Zone/Hospital plans to be updated when revisions to the New Brunswick Blood Shortage Management plan are received. This includes the inclusion and implementation of any updated forms by the TM Labs (*To be discussed at PEBMC meeting Oct 17, 2014*)
4. A process to be developed so that all contact information, both for PEBMC and TM Labs is updated quarterly. (*Will be done quarterly as per PEBMC meeting minutes Feb 7, 2014*)
5. Discuss with PEBMC method to ensure all members or their alternates have received teleconference information. (*To be discussed at PEBMC meeting Oct 17, 2014*)
6. Forms should be sent in a format that is easily accessible to facilities to incorporate into their plans. (*Completed*)

Simulation Exercise: August 21, 2014

16:10: The Chair of PEBMC was notified on August 20, 2014 that there will be a Blood shortage simulation exercise on August 21st commencing at 08:00.

08:00: CBS initiated the simulation of a Red Phase Inventory Alert of platelets with an email to the P/T Blood Liaison at the Department of Health, who serves as the administrative arm of the PEBMC. CBS faxed the Simulation Alert Advisory to all the NB Transfusion Medicine Labs and they were also notified by telephone that an important Fax was being sent. An email was also sent to key hospital contacts.

The exercise scenario, as provided to Transfusion Medicine Labs:

FOR IMMEDIATE ACTION

THIS IS NOT A REAL BLOOD SHORTAGE IT IS A SIMULATED SHORTAGE TO TEST HOSPITAL EMERGENCY PLANS ONLY! DO NOT CANCEL ANY TRANSFUSIONS BASED ON THIS EXERCISE

As per the **National Plan for Management of Shortages of Labile Blood Products, RED Phase** implies that inventory levels are insufficient to ensure that patients will receive the required transfusion(s).

Due to a hurricane which has affected the Atlantic coast, Canadian Blood Services has experienced a 1 day loss of apheresis platelets and whole blood collections at Maritime clinic locations. Dartmouth and Saint John distribution sites are experiencing a temporary platelet shortage.

Imports of platelet components have been arranged from other Canadian Blood Services sites, however, due to the closure of local airports these products are being delivered by direct drive from Ottawa and Toronto. Anticipated time to recovery is 8am on 2014-08-22.

During this Red Alert Phase all platelet orders will be triaged by Dartmouth distribution staff through a Canadian Blood Services Medical Director.

This was complete by 08:33. 100% of Hospitals returned a confirmation of receipt.

08:16: The DoH sent an email containing teleconference information to members and alternates of the PEBMC to advise them that a teleconference would be held at 13:00.

08:18: Email sent to the Blood System Advisory Group, the Executive Management Committees of the Regional Health Networks and the Department of Health to advise them that a blood shortage simulation was underway.

11:00: A teleconference with the Hospital TM supervisors/designates, CBS and the DoH was held. At the time of the call 16/20 Labs had reported their inventory numbers to CBS as requested with 3 additional received before noon. Only 1 facility did not provide this information. There were 12/20 facilities on the call and all zones with the exception of one were represented. All 12 facilities present reported no issues with the notification process and the question arose if inventory numbers are required if the facility does not stock the product. Facilities were advised to send in the form anyway so that no assumptions are made. Eleven facilities used the inventory form and 8 used other forms such as the Hospital Order Form, Fax alert/cover sheet or plain paper. **1) Ensure that all facilities even the small ones are aware of their BEMP and where to locate the plan and associated paperwork.**

13:00: A teleconference with the PEBMC was convened. 13/ 22 (59%) areas of membership were represented. Representation from CBS was 100%, DoH was 100%, and RHA's was low at 38%) A "read receipt" was sent with the email notification. In a real shortage those not replying to the email would be telephoned to advise them of the teleconference. **2) Need to ensure that teleconference notification is received by all members or their alternate.**

An overview of events was given by the P/T Blood Liaison and RHA's were asked to provide any feedback. A discussion on means to increase participation on the PEBMC call was held and will be further discussed at the next PEBMC meeting scheduled for October 17, 2014.

08:20: August 22, 2014 CBS faxed and telephoned the Recovery Phase Alert to all hospitals to advise them that the simulation was over. 100% of Hospitals sent the confirmation of Fax received back to CBS.

An email was also sent to the PEBMC, BSAG, and the Executive Management Committees of Horizon, Vitalité and the DoH notifying all that the exercise was over.

Results:

Response to Communications: (Attachment A)

Eight Zones participated in this exercise comprised of 20 facilities. Some of the smaller facilities are represented by their zone supervisors.

- All 20 facilities were sent the Red Phase Advisory Fax from CBS with a follow-up call within 17 minutes and 100% sent in their confirmation of receipt.
- All facilities with the exception of one (95%) sent their inventory numbers to CBS. Note: 15/20 prior to the inventory call with CBS at 11:00 and 4 following the call.
- There was an 88% rate of zone participation on the CBS Inventory call. One Zone and one Regional Hospital (*the smaller facilities in the zone attended*) were not represented but they did reply to the faxes and sent in their Inventory numbers to CBS.
- 100% of hospitals returned their confirmation of receipt for the recovery Fax/phone call from CBS.

Evaluation Survey Results: (Attachment B)

All evaluations (100%) were returned. Eight Zones with a total of 20 facilities.

- All facilities reported receiving notification within 50 minutes of the start of the exercise.
- **100% of facilities reported that they were satisfied with the communications during the exercise and that their TM department was prepared to meet the problem.**
- When asked if senior TM staff were notified when fax received, 16 (80 %) replied yes, 3 not applicable and 1 facility reported no. (*This facility reported they will be reviewing process with lab staff*)
- 6 Facilities advised their Medical Director, 1 advised oncology department (*Medical Director on vacation*), 4 did not and 9 reported not applicable.
- 5 facilities reported that their Emergency Blood Management Committee was notified.
- 2 small facilities reported that a process / procedure for Emergency Blood Management was not available and one reported that it was available but not consulted.
- When asked if key staff members were available on site 15 replied yes, 1 replied no and 4 reported not applicable.
- Were alternate staff members familiar with the process: 12 replied yes, 3 No and 5 N/A
- When asked if the unannounced simulation had a positive effect on their TM Labs preparedness for a blood shortage: 15 (75%) Responded YES, 3 (15%) NOT SURE and 2 (10%) stated NO. (*The 5 negative responses were from the smaller facilities of the 2 Zones who have indicated that staff requires further education on the plan*).

Response to teleconference by PEBMC:

All members and alternates were sent an email with teleconference instructions.

- Thirteen of the twenty-two areas of membership (59%) attended the teleconference.
- Representation from the RHA was 38%, CBS 100% and the DoH 100%.
- There was a read -receipt sent with the email announcing the teleconference. Three recipients had not returned the read receipt and 2 had read the email after the teleconference had taken place.
- Four recipients had an out of office message with an alternate contact and that person was contacted although as they were not a designated alternate on PEBMC they did not have any background on the plan.

The PEBMC will discuss a strategy at their next scheduled meeting to ensure all members or designates are advised of the teleconference.

Announced (Apr 16th) vs Unannounced (Aug 21st) simulation comparison: (Attachment H)

- There was a 100% response to the evaluation questionnaire on the August simulation, an increase from 45% from that of April.
- 100% of facilities responded to the Fax/phone call/emails received from CBS during both simulation exercises.
- During both simulations one small facility did not send in Inventory numbers to CBS (different *facility during each exercise*).
Attendance on the CBS Inventory call increased from 35% to 60% of facilities represented and Zone representation increased from 75% to 88%.
- Of the two Zones who had no representation on the April inventory teleconference one had all 4 facilities attend the August call, while the other did not have representation from the Regional Facility, but their two small facilities attended.
- Respondents who agreed that the simulation had a positive effect on their preparedness for a blood shortage increased from 56% to 75% and those "not sure" or "somewhat agreed" decreased from 33% to 15%. Those disagreeing increased from 10% to 11%.

The two zones whose response was not positive for the August simulation commented on their evaluation that education on the BEMP is required. One Zone indicated that the plan is in place but staff did not refer to it and will have a refresher at next staff meeting. The other Zone indicated a change in Medical Director and the formation of a local EBMC will finalize their plans and staff will then be educated.

- The use of an official form to record Inventory when reporting to CBS declined during the unannounced August simulation from 79% to 53% but mainly in the zones who have indicated further education is required.
- Platelet inventory was still forwarded to CBS as requested by other means such as the Hospital Order form, blank paper or Fax cover sheet, but this may be an indication that not all facilities, including the smaller ones, are being kept current with the plan.
- The use of the Inventory form from version 2.0 of the NB Blood Shortage Management Plan (✓New) declined from 11 facilities to 6 facilities during the August simulation. During the announced simulation in April these forms were forwarded to the facilities prior to the simulation but this was not the case in the August exercise. This may indicate that forms have not been updated in RHA /Zone/ Hospital plans.

Lessons Learned:

- 1) Some staff especially in the small facilities were not aware of the NB Blood Shortage Management Plan / BEMP and where to locate the most current forms.
- 2) There is still education required in some facilities to ensure all staff is familiar with their BEMP.
- 3) A process should be developed to ensure that the teleconference notification is received by all members of the PEBMC or their alternate.

Recommendations:

- 1) The PEBMC to develop a strategy to ensure all members or their alternates receive teleconference information.
- 2) Ensure that all facilities even the small ones are aware of their BEMP and where to locate the plan and associated paperwork. Staff education is essential to the functioning of the plan especially in the zones that identified this as a gap.
- 3) Recommend continuing with the announced and unannounced exercises each year to provide the practice required to activate the plan seamlessly.

Conclusions:

Overall the simulation was a success as it demonstrated an increased engagement from all Transfusion Medicine Labs in the Province and indicated it positively impacted the TM Lab emergency preparedness in the event of a blood shortage. It also underlines the need for frequent review and exercises to maintain familiarity with the plan.

The simulation exercise revealed that some education is still required to ensure TM Staff in all facilities, most notably the smaller ones, are trained to their BEMP and that not all plans have been updated with version 2.0 of the NB Blood Shortage Management Plan.

There was an extremely positive participation from TM Labs with 100% response rate to the Advisory Faxes and simulation evaluation. 95% of TM Labs provided CBS with their inventory numbers and there was an increased participation on the CBS inventory teleconference.

Although there was an increased level of participation from the TM Labs during this simulation there was a smaller rate of participation on the PEBMC teleconference by the RHA. This will be addressed at the next scheduled meeting of the PEBMC as this committee is responsible for the communication and decisions on how NB proceeds when there is a shortage. The activation of the plan and subsequent teleconferences could create a conflict resulting in lower participation by RHA staff who also convene meetings according to their plans.

New Brunswick is in a good position to react to a blood shortage but as demonstrated by the increased awareness during the second simulation exercise it is essential to have these exercises on a regular basis to keep all stakeholders engaged and current.

The committee is extremely grateful for the support we were given during this exercise by CBS, the TM Labs, PEBMC and all stakeholders. Participation and engagement in events such as this are critical to ensure our plans are appropriate in order to coordinate a provincial response to a blood shortage.

References:

The New Brunswick Emergency Blood Management Plan. *Version 2.0*

National Plan for Management of Shortages of Labile Blood Products. - *January 2012*

Provincial Emergency Blood Management Committee: Final Report of Simulation Exercise April 16, 2014- *June 2014*

Attachments:

Attachment A: PEBMC Unannounced Simulation Exercise (TM Lab engagement)

Attachment B: Evaluation of Blood Shortage Simulation-Hospital Responses

Attachment C: CBS Fax cover sheet

Attachment D: CBS Inventory Teleconference Agenda - Sample

Attachment E: CBS Red Phase Alert Advisory

Attachment F: CBS Recovery Phase Advisory

Attachment G: Evaluation of the Blood Shortage Simulation Exercise

Attachment H: Announced vs Unannounced Simulation Comparison

Attachment A: Transfusion Laboratory Engagement

PEBMC Unannounced Blood Shortage Simulation Exercise August 21, 2014							
Hospital	Zone	Advisory Alert Phone Call Contact time	Advisory Fax Confirmation received	Inventory Fax received	Recovery Phone call contact time	Recovery Fax confirmation received	CBS Inventory Teleconference
1V:A	1 VHN	8:26	yes	yes	8:30	yes	NO
1V:B	1 VHN	8:22	yes	yes	8:37	yes	NO
1H:A	1 HHN	8:27	yes	yes	8:31	yes	YES
1H:B	1 HHN	8:20	yes	yes	8:36	yes	NO
2H:A	2	8:30	yes	yes	8:38	yes	NO
2H:B	2	8:31	yes	yes	8:40	yes	YES
2H:C	2	8:33	yes	yes	8:44	yes	YES
3H:A	3	8:23	yes	yes	8:27	yes	YES
3H:B	3	8:16	yes	yes	8:34	yes	YES
3H:C	3	8:18	yes	yes	8:35	yes	YES
3H:D	3	8:31	yes	yes	8:43	yes	YES
4V:A	4	8:22	yes	yes	8:27	yes	YES
4V:B	4	8:24	yes	yes	8:28	yes	NO
4V:C	4	8:23	yes	No	8:39	yes	NO
5V:A	5	8:20	yes	yes	8:25	yes	YES
6V:A	6	8:18	yes	yes	8:23	yes	YES
6V:B	6	8:21	yes	yes	8:26	yes	YES
6V:C	6	8:25	yes	yes	8:29	yes	NO
6V:D	6	8:32	yes	yes	8:42	yes	NO
7H:A	7	8:28	yes	yes	8:32	yes	YES
CBS	Fax sent Aug 21 @ 8:10				Fax sent Aug 22@ 8:20		HLS Site Manager Medical Director
Department of Health							P/T Liaison P/T Liaison
Comments		Calls took 17 minutes	100%	95% 1 Small facility who does not stock plts did not respond	Calls took 17 minutes	100%	Zone 1A not represented and Zone 2 Regional Facility not represented
							88% Zone representation

AUGUST 21, 2014 UNANNOUNCED BLOOD SHORTAGE SIMULATION EXERCISE REPORT

Attachment B: Evaluation of Simulation- Hospital Responses

Evaluation of Blood Shortage Simulation August 21, 2014 - Hospital Responses												
Zone	Evaluation Questions	1 What time did you receive notification of exercise	2 Were you satisfied with the communication during this exercise	3 Senior TM Lab Staff notified when fax received	4 Medical Director/Designate notified when fax received	5 EBMC notified	6 Was a process/procedure for emergency blood management response	7 Were the key staff members available on site	8 Were the alternate staff members familiar with the required process	9 Was the TM department in you facility prepared to meet the problem	10 Did the unannounced simulation have a positive effect on your preparedness for a blood shortage.	Comments
1HHN	1H:A	828	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Anne Robinson was in Miramichi lab for the day. Available for phone consultation if needed.
1HHN	1H:B	830	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
1VHN	1V:A	830	Yes	Yes	No*	Yes	Yes	Yes	No	Yes	Yes	* On vacation notified oncology. This is a good practice to make staff working aware of plans as they rotate labs. Should have these more often for technical staff.
1VHN	1V:B	830	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
2	2H:A	837	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Manager of TM not notified by technologist as per checklist in policy and procedure. Tehnologist did not use checklist as required. Review of policy & procedure will take place at TM staff meeting on Aug 27, 2014
2	2H:B	856	Yes	Yes	N/A	N/A	Yes	N/A	Yes/N/A	Yes	Not sure	This is a small site part of Zone 2, we answer to SJRH this is why we didn't notify the people in question 4 & 5 because it looks like the SJRH staff would do so
2	2H:C	900	Yes	N/A	N/A	N/A	Yes	N/A	N/A	Yes	No	
3	3H:A	825	Yes	Yes	No	N/A	Yes*	Yes	No ⁴	Yes	Yes	SOP is on Sharepoint but was not consulted as to process of notification. No committee at present. Area EBMC will occur Oct 2014. 3. SOP not consulted.4. As there were missing processes full education to staff has not yet occurred. With new Medical Director and a new area EBMC expected to be formed in Oct, a role out of complete process with education is expected to occur shortly after.
3	3H:B	830	Yes	Yes	N/A	N/A	Yes	Yes	N/A	Yes	Not sure	
3	3H:C	830	Yes	Yes	N/A	N/A	No	Yes	Yes	Yes	No	
3	3H:D	900	Yes	N/A	N/A	N/A	Yes	Yes	N/A	Yes	Not sure	URVH does not routinely stock plts for transfusion and no suspected transfusions during the extent of the mock shortage.
4	4V:A	816	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	
4	4V:B	830	Yes	Yes	N/A	N/A	Yes	Yes	N/A	Yes	Yes	
4	4V:C	848	Yes	Yes	No	No	Yes	No	No	Yes	Yes	
5	5V:A	820	Yes	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes	
6	6V:A	820	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	
6	6V:B	815	Yes	Yes	N/A	N/A	Yes	N/A	Yes	Yes	Yes	
6	6V:C	820	Yes	N/A	N/A	N/A	No	N/A	N/A	Yes	Yes	There is no procedure in place for the managemnt of blood shortages because we only have 2 O Negs for emergency situations
6	6V:D	805 Ph 838 Fax	Yes	Yes	N/A	N/A	Yes	Yes	Yes	Yes	Yes	Do you have any positive or constructive feedback for us?
7	7H:A	907	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Attachment C: CBS Fax Cover Sheet



270 John Savage Ave.
Dartmouth, NS B3B 0H7
(Local) T 902-480-5678 F 902-480-5677
(Toll Free) T 855-352-5663 F 855-305-6904
www.blood.ca www.sang.ca

FAX TRANSMISSION REPORT RAPPORT DE TRANSMISSION DE TÉLÉCOPIÉ

TO/DESTINATAIRE: New Brunswick Hospitals/Hôpitaux du Nouveau-Brunswick

ATTENTION/ À l'attention de: Laboratory Manager/Chief Technologist
Transfusion Medicine Laboratory/
Chef de laboratoire/technologue en chef
Laboratoire de médecine transfusionnelle

COMPANY/ENTREPRISE: Canadian Blood Services/Société canadienne du sang

FAX No./No DE TÉLÉCOPIEUR: 1-855-305-6904

FROM/EXPÉDITEUR: Cindy Stimson, Site Manager, Product and Hospital Services/
Cindy Stimson, chef d'établissement, Gestion des
Produits et service à la clientèle hospitalière

TELEPHONE No./N° DE TÉLÉPHONE: 902-480-5818

DATE: 2014-08-21

**NUMBER OF PAGES INCLUDING COVER SHEET/
NOMBRE DE PAGES, COMPRIS LA PAGE DE COUVERTURE:** 2

COMMENTS/COMMENTAIRES:

Blood Shortage Simulation / Exercice de simulation de pénurie du sang

To confirm receipt of this notification please return a signed copy of this cover page by fax to 1-855-305-6904

Afin d'accuser réception de cet avis, veuillez signer et renvoyer la page de couverture par fax au numéro ci-dessous. Télécopieur: 1-855-305-6904

Name / nom _____ Signature _____

Date: _____ Time / heure: _____

ATTENTION/AVERTISSEMENT

This facsimile is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If you have received this facsimile in error, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. Please notify Canadian Blood Services immediately by return facsimile and destroy the document without making a copy.

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Attachment D: CBS Inventory Teleconference Agenda - Sample

Meeting:	Blood Shortage Simulation Exercise – Red cell Inventory in Amber Phase	Date:	
Teleconference :	Toll Free # 1-866-752-7690 Pass code: # 1026108#	Time:	
Attendees:			
<ul style="list-style-type: none"> • Zone1B • Zone 1SE • Zone 2 • Zone 3 		<ul style="list-style-type: none"> • Zone 4 • Zone 5 • Zone 6 • Zone 7 	
• NB Dept. Health		• CBS	
• Other		• Other	
Time	Item and Details	Lead	
10 min	1. Situation Update <ul style="list-style-type: none"> • Reminder that this is a Simulation only, blood orders and surgeries should not be cancelled • Instructions 	CBS HLS PT Blood Liaison	
10 min	2. Site Update <ul style="list-style-type: none"> • Current inventory levels, include all inventory (i.e. reserved, crossmatched units) • What actions could be taken, if any (i.e. redistribution, reduction of target inventory levels) 	All Zones	
10 min	3. Next Steps <ul style="list-style-type: none"> • Attend follow up teleconference (date/time) for a debriefing • Questions/Comments 	PT Blood Liaison	
	4. Adjourn Meeting		

Attachment E: CBS Red Phase Alert Advisory



IMMEDIATE ACTION REQUIRED

TO: Laboratory Director, Transfusion Medicine Supervisor, All NB Hospitals
FROM: Cindy Stimson, Manager, Production
DATE: 2014-08-21
SUBJECT: **SIMULATION EXERCISE
Inventory Alert- (Platelets)**

☐ Green Phase ☐ Amber Phase ☒ **Red Phase** ☐ Recovery Phase

THIS IS NOT A REAL BLOOD SHORTAGE IT IS A SIMULATED SHORTAGE TO TEST HOSPITAL EMERGENCY PLANS ONLY! DO NOT CANCEL ANY TRANSFUSIONS BASED ON THIS EXERCISE.

As per the National Plan for Management of Shortages of Labile Blood Products, RED Phase implies that inventory levels are insufficient to ensure that patients will receive the required transfusion(s).

Due to a hurricane which has affected the Atlantic coast, Canadian Blood Services has experienced a 1 day loss of apheresis platelets and whole blood collections at Maritime clinic locations. Dartmouth and Saint John distribution sites are experiencing a temporary platelet shortage.

Imports of platelet components have been arranged from other Canadian Blood Services sites, however, due to the closure of local airports these products are being delivered by direct drive from Ottawa and Toronto. Anticipated time to recovery is 8am on 2014-08-22.

During this Red Alert Phase all platelet orders will be triaged by Dartmouth distribution staff through a Canadian Blood Services Medical Director.

**Please provide Canadian Blood Services with your current hospital Platelet Inventory by 10:00am today
Fax to 1-855-305-6904**

A teleconference for all NB Hospitals is scheduled today at 1100 HRS, please ensure your Transfusion Medicine Supervisor / Chief Technologist or suitable laboratory designate participates. Call in number 1-866-752-7690 passcode 1026108#

If you have any concerns please feel free to contact me.

Cindy Stimson, Manager, Production
Canadian Blood Services
Cindy.stimson@blood.ca (902) 480-5618

c. Dorothy Harris, Hospital Liaison Specialist, Atlantic
Dr. K. Misik, Medical Director
Dr. E. Kahwash, Medical Director
Michelle Rogerson, Director Supply Chain Operations, Atlantic
Bernadette Mulise, Provincial/Territorial Blood Liaison
Gail Samaan, Provincial/Territorial Blood Liaison

Dartmouth Production and Distribution Centre
Telephone 1-855-352-5663, Fax 1-855-305-6904

Attachment F: CBS Recovery Phase Advisory

**IMMEDIATE ACTION REQUIRED**

TO: Laboratory Director, Transfusion Medicine Supervisor, All NB Hospitals
FROM: Cindy Stimson, Manager, Production
DATE: 2014-08-22
SUBJECT: Inventory Alert- (Platelet)

☐ Green Phase ☐ Amber Phase ☐ Red Phase ☒ Recovery Phase

Further to our SIMULATION INVENTORY RED ALERT sent on 2014-08-21, Dartmouth and Saint John distribution sites have received additional platelet inventory and are now in recovery phase.

As per the **National Plan for Management of Shortages of Labile Blood Products**

Recovery Phase implies that blood component inventories have begun to increase and are expected to be maintained at a level would enable hospitals to move from Red to Amber and subsequently to the Green Phase, or from Amber to Green Phase.

The SIMULATION EXERCISE is now OVER.

If you have any questions or concerns please feel free to contact me.

Cindy Stimson, Manager, Production
Canadian Blood Services
Gail.samaan@blood.ca (902) 480-5617

C. Dorothy Harris, Hospital Liaison Specialist, Atlantic
Dr. K. Mielik, Medical Director
Dr. E. Kahwash, Medical Director
Michelle Rogerson, Director Supply Chain Operations, Atlantic
Bernadette Mulise, Provincial/Territorial Blood Liaison
Gail Samaan, Provincial/Territorial Blood Liaison

Dartmouth Production and Distribution Centre
Telephone 1-855-352-5663, Fax 1-855-305-6904

Attachment G: Evaluation of the Blood Shortage Simulation Exercise

Evaluation of the Blood Shortage Simulation Exercise

Instructions: Please complete with your actions and comments. This will help assess the impact of the 'simulated shortage' at your facility. This information will help to evaluate the functioning of the Provincial Blood Shortage Management Plan and indicate any need to make revisions for improvement for future situations. To be filled out by the person in charge in the blood bank during the simulation.

Site and Event Information	
Name of facility:	
Completed By:	Date:
Position:	
Simulation actions:	
1. What time did you receive notification of the exercise?	Time/heure:
2. Were you satisfied with the communications during this exercise?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially
3. Senior Transfusion Lab staff notified when CBS Fax received	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
4. Medical Director/ Designate notified when CBS Fax received	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
5. Emergency Blood Management Committee (EBMC) notified	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
6. Was a process/ procedure for emergency blood management response available?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Hard to find
7. Were the key staff members available on site?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
8. Were the alternate staff members familiar with the required process?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
9. Was the Transfusion Medicine department in your facility prepared to meet the problem?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partially
10. Did the unannounced simulation have a positive effect on your preparedness for a blood product shortage	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
Comments: <i>Your comments will assist with improvements to the process.</i>	

Thank you for your participation, on behalf of

CBS and the NB Provincial Emergency Blood Management Committee

Please FAX to NB Department of Health - Gail Samaan (506) 444-5050, gail.samaan@gnb.ca

AUGUST 21, 2014 UNANNOUNCED BLOOD SHORTAGE SIMULATION EXERCISE REPORT

Attachment H: Announced vs Unannounced Comparison

Simulation Exercise April 16, 2014 vs Unnnanounced Exercise Aug 21, 2014													
Hospital	Zone	Fax receipt for Alert Advisory returned	Fax receipt for Alert Advisory returned	Inventory sent to CBS	Inventory sent to CBS	Facilities Attending Inventory Call	Facilities Attending Inventory Call	Fax receipt for Recovery Fax returned	Fax receipt for Recovery Fax returned	Did simulation have a positive effect on Labs preparedness for a blood shortage	Did simulation have a positive effect on Labs preparedness for a blood shortage	Used Inventory Form for reporting	Used Inventory Form for reporting
		April	August	April	August	April	August	April	August	April	August	April	August
1V:A	1VHN	✓	✓	✓	✓	✓	✗	✓	✓	Strongly agree	Yes	✓	✓
1V:B	1VHN	✓	✓	✓	✓	✗	✗	✓	✓		Yes	✓	✓
1H:A	1HHN	✓	✓	✓	✓	✓	✓	✓	✓	Strongly agree	Yes	✓ ^{New}	✓
1H:B	1HHN	✓	✓	✓	✓	✗	✗	✓	✓		Yes	✓ ^{New}	✗
2H:A	2	✓	✓	✓	✓	✗	✗	✓	✓	Somewhat agree	Yes	✗	✓ ^{New}
2H:B	2	✓	✓	✓	✓	✗	✓	✓	✓		Not sure	✗	✗
2H:C	2	✓	✓	✓	✓	✗	✓	✓	✓		No	✗	✗
3H:A	3	✓	✓	✓	✓	✗	✓	✓	✓	Strongly agree	Yes	✓ ^{New}	✗
3H:B	3	✓	✓	✗	✓	✗	✓	✓	✓		not sure	n/a	✗
3H:C	3	✓	✓	✓	✓	✗	✓	✓	✓		no	✓ ^{New}	✗
3H:D	3	✓	✓	✓	✓	✗	✓	✓	✓		not sure	✗	✗
4V:A	4	✓	✓	✓	✓	✓	✓	✓	✓	Somewhat agree	Yes	✓ ^{New}	✓ ^{New}
4V:B	4	✓	✓	✓	✓	✓	✗	✓	✓	Strongly agree	Yes	✓	✓ ^{New}
4V:C	4	✓	✓	✓	✗	✗	✗	✓	✓		Yes	✓ ^{New}	n/a
5V:A	5	✓	✓	✓	✓	✗	✓	✓	✓	Strongly agree	Yes	✓	✓
6V:A	6	✓	✓	✓	✓	✓	✓	✓	✓		Yes	✓ ^{New}	✗
6V:B	6	✓	✓	✓	✓	✓	✓	✓	✓		Yes	✓ ^{New}	✓ ^{New}
6V:C	6	✓	✓	✓	✓	✗	✗	✓	✓		Yes	✓ ^{New}	✓ ^{New}
6V:D	6	✓	✓	✓	✓	✗	✗	✓	✓	Disagree	Yes	✓ ^{New}	✓ ^{New}
7H:A	7	✓	✓	✓	✓	✓	✓	✓	✓	Somewhat agree	Yes	✓ ^{New}	✓
Facilities		20/20 100%	20/20 100%	19/20 95%	19/20 95%	7/20 35%	12/20 60%	20/20 100%	20/20 100%	Strongly agree 56% Somewhat agree 33% Disagree 11%	Yes: 75% Not Sure: 15% No: 10%	79%	58%
						6/8 Zones	7/8 Zones			Survey response: 45%	Survey response:100%		