**How to Respond in a Blood Shortage – Information for Nurses**

In the event of a blood shortage, hospitals will be notified by Canadian Blood Services (CBS). If the shortage is severe, it will impact patient care. Depending upon the etiology of the shortage, it could affect one or more components and products. Each hospital in Ontario should have a comprehensive plan for the management of blood shortages. This information is intended as a quick reference. Please refer to your hospital-specific plan for more details, including the way in which nurses are involved in decision-making at your institution.

**Some of the implications for nurses are listed below:**

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| **Situation** | **Impact(s)**  |
| * + - 1. **Amber Phase Notification** – First indication of a blood shortage. It could be provincial or national in scope.
 | * You will receive a message according to your hospital’s policy informing you about the shortage and what product is affected.
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| * + - 1. **First Response –** your transfusion lab will reduce the target inventory of product held on-site
 | * No immediate significant impact.
* Orders for blood products will be filled according to institutional guidelines.
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| * + - 1. **Deferral of Elective Transfusions/Procedures** – if the first response is not sufficient to correct the shortage, hospitals may be directed to defer or cancel elective use of the affected blood component(s)/product(s) to preserve the supply for life-threatening situations.
 | * Patients who may require a blood transfusion will be assessed and orders deferred where possible.
* Elective surgeries or invasive procedures associated with blood transfusion will be deferred or canceled until further direction is received in order to conserve inventory affected by the shortage.
* You may be asked to document these decisions – a tracking log/form will be provided in your hospital plan.
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| * + - 1. **All orders for the affected blood component or product will be reviewed to determine urgency of need.**
 | * All orders for the affected blood component or product will be reviewed before being approved for issue.
* Your hospital will have criteria for approving orders.
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| * + - 1. **Platelet shortage**
 | * Restrictive platelet count thresholds for transfusion will be used.
* Platelet dosesmay be split at sites with this ability.
* Extension of shelf life may occur at sites with this ability.
* Use of pharmacologic options e.g. tranexamic acid may increase.
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| * + - 1. **Red Blood Cell shortage**
 | * Restrictive hemoglobin thresholds for transfusion will be used.
* Switching ABO or Rh Groups: The transfusion laboratory may need to provide red cells of a compatible but different Rh and/or ABO group for your patient.
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| 1. **Plasma Protein Products** these shortages are rare and may include factor concentrates, IVIg, albumin, or others. Manufacturing problems may necessitate a very large recall of product.
 | * These types of shortage are usually national in scope
* Direction for action would be communicated through the National Advisory Committee on Blood and Blood Products

([www.nacblood.ca](http://www.nacblood.ca)). |
| 1. **Red Phase Notification** This level of shortage indicates a critical supply shortage.
 | * Your hospital will be notified through CBS, and the Ministry of Health and Long-Term Care will be involved.
* You will receive a message according to your hospital’s policy informing you about the shortage and what product is affected.
* All blood transfusions will be for life-threatening conditions only.
* A **triage team** at your hospital will review any use of blood and follow a National Guidance document to aid in decision making.
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| 1. **Recovery Notification**
* Your hospital will be notified once the supply shortage has been corrected.
* Measures to continue to minimize blood use may continue for a period of time to avoid falling back into shortage.
* Elective use of the affected blood component/product will normalize slowly.
* You may be asked to participate in a review of the blood shortage experience to assess how your hospital responded.
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