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

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 physicians are involved in decision-making at your institution.

**Some of the implications for physicians 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.
* Continue to order blood product 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.
 | * Assess patients who may require a blood transfusion and defer it where possible.
* Elective surgeries or invasive procedures associated with blood transfusion will be deferred or canceled until further direction is received.
* Document these decisions – a tracking log/form will be provided – contact your blood transfusion laboratory.
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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**
 | * Use restrictive platelet count thresholds for transfusion
* Platelet dosesmay be split at sites with this ability
* Extension of shelf life may occur at sites with this ability.
* Use pharmacologic options e.g. tranexamic acid
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| 1. **Red Blood Cell shortage**
 | * Use restrictive hemoglobin thresholds for transfusion
* Order only one unit at a time
* 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 blood component or 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 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 well your hospital responded.
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