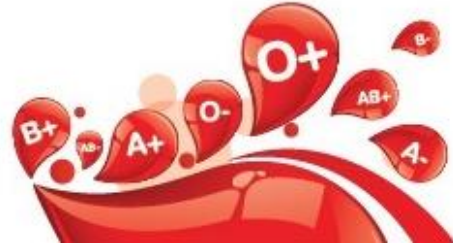


# BloodBrief

## -An Update on Autologous Donation-



2017-04-26

Dear Hospital Colleague:

Perioperative autologous blood donation (PAD) is the banking of red cell units (rarely plasma) collected from a patient before a planned surgery. The use of PAD was promoted after the [Krever Commission](#) recommendations to improve blood safety as a response to viral transmission by allogeneic blood during the HIV epidemic of the early 1980s. The 2015 [residual risk estimates](#) of a potentially infectious donation in Canada are very low at 1 in 21.4 million donations for HIV, 1 in 12.6 million donations for HCV and 1 in 7.5 million donations for HBV. Given the current exceedingly low risk of transfusion-transmitted infection by allogeneic blood and the continued risks of transfusion-associated circulatory overload (TACO), bacterial contamination and receiving the wrong unit, the rationale and safety of routine PAD has been questioned. Autologous blood donation before surgery can contribute to preoperative anemia and a greater need for perioperative transfusions. The cost-effectiveness and the balance between the risks and benefits need to be examined as 60-80% of units collected are discarded. This is a waste of the patient's blood, time and health care resources.

The [Choosing Wisely Canada campaign](#) has recommended that physicians 'don't routinely order perioperative autologous and directed blood collection...except for selected patients (for example, with rare blood antigens)' and the [BSH guideline on PAD](#) only recommends its use in 'exceptional circumstances'.

There is no role for routine perioperative autologous donation except for selected patients (such as those with rare blood groups or multiple blood group antibodies where compatible allogeneic blood is difficult to obtain, patients at serious psychiatric risk because of anxiety about exposure to allogeneic blood, and potentially patients who refuse to consent to donor blood transfusion but will accept PAD).

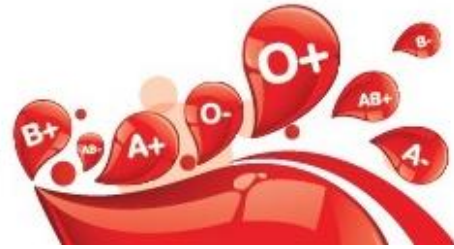
Nationally, the demand for perioperative autologous units for transfusion has been declining steadily since 2007 (Figure 1). This shift in demand is encouraging but relatively high use continues at certain sites.

To promote optimal utilization of autologous perioperative donation, we are engaging hospital transfusion committees via this BloodBrief. This BloodBrief provides 3 years of PAD red cell issue data specific to hospitals, ranking within the PAD issues list, anonymized and identified issue data for select hospitals across the country as a reference. **Data from hospital-based autologous collection sites are not included.** Please refer to the footnotes within the BloodBrief data tables when reviewing the data.

Our goal is to heighten hospital awareness of autologous red cell issue trends over time and compared to other hospitals. Results from the BloodBrief effectiveness survey conducted in January 2016 confirmed survey results from 2014 and revealed that for 90% of survey respondents, the BloodBrief highlighted data/information that was new and it also prompts hospitals to review transfusion practice and blood component demand.

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Hospitals have asked if hospital names could be provided within the BloodBrief, to enhance benchmarking. You will see that this BloodBrief includes the names of hospitals who have given permission to be “unblinded”. If your hospital name is not shown, but you feel it would be acceptable to do so in future BloodBriefs, please let us know by contacting your Hospital Liaison Specialist.

Please do not hesitate to contact us directly with any questions or comments you may have regarding the content of this BloodBrief. Alternately, your local Canadian Blood Services Medical Officer or Hospital Liaison Specialist is available as well.

Sincerely,

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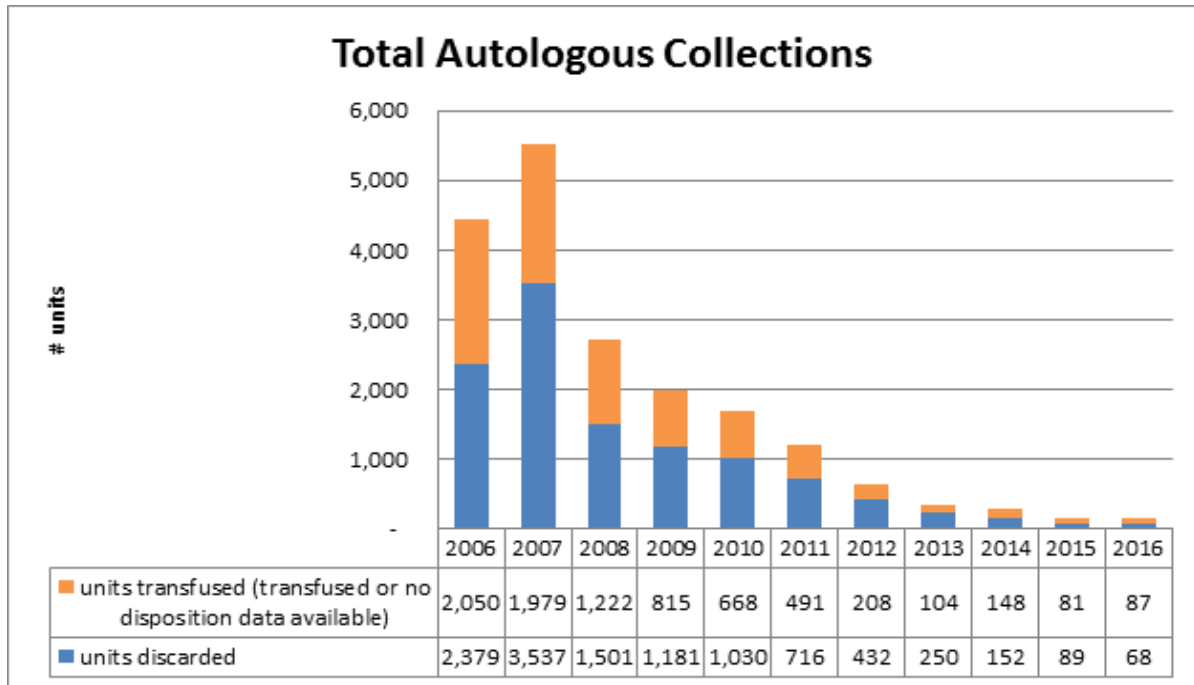


Figure 1: Total autologous collections (red cells) at Canadian Blood Services by year