

Table 4-1. Estimated 2014 Collection by AABB US Member Blood Centers (expressed in thousands of units)

Activity	Blood Centers		% Change 2013-2014	P-value
	2014	2013		
WB/RBC Collections				
WB Allogeneic (including directed)	10,949	11,183	-2.1	0.008
RBC Apheresis Allogeneic	1,830	1,835	-0.3	NS
Total Allogeneic Supply	12,779	13,018	-1.8	0.019
Rejected on Testing	86	85	1.2	NS
Rejected for Other Reasons	730	613	19.1	<0.001
Available Supply (excluding autologous collection)	11,964	12,320	-2.9	NS

NS = Not Statistically Significant.

Total WB/RBC Collections

The total WB-derived and apheresis RBCs (including autologous units) collected in the United States in 2015 was 12.8 million ($\pm 190,000$) units (**Table 4-2**). Blood centers collected 12.3 million units, or 95.7% of the total. The remaining 554,000 units (4.3%) were collected by hospitals. These percentages are comparable to those reported by CDC in the 2015 NBCUS results.*

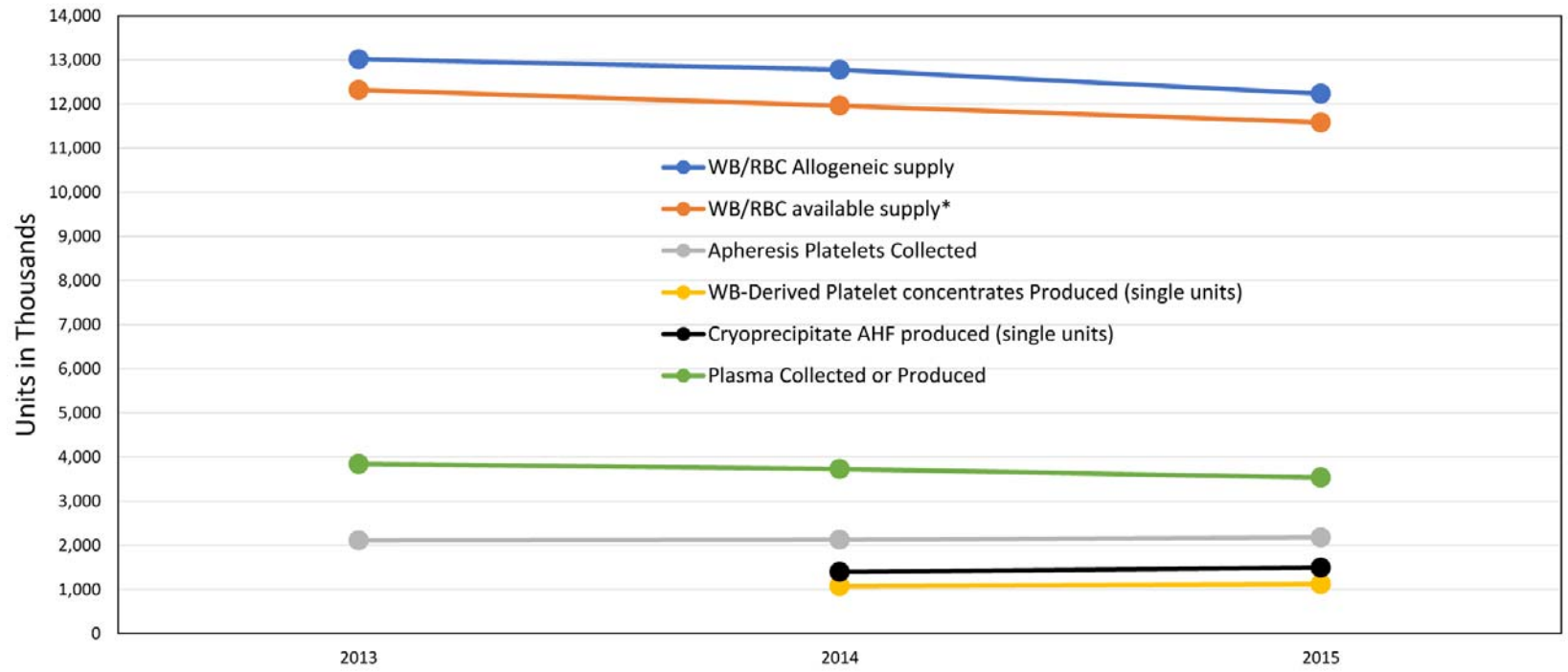
*Ellingson KD, Sapiano MRP, Haass KA, et al. Continued decline in blood collection and transfusion in the United States—2015. *Transfusion* 2017;57:1588-98. doi:10.1111/trf.14165.

The number of units rejected for unacceptable test results decreased by 20.0% compared to 2013 ($p < 0.001$). While this change seems large, the proportion of collections with reactive infectious disease marker results was 0.6%, comparable to 2013 (0.7%). There were an additional 599,000 ($\pm 24,000$) units that were discarded for reasons other than testing (eg, QC, bag failures). 12.1 million WB/RBC units were reported available for transfusion, 94.8% of the total units collected.

Whole Blood (WB)

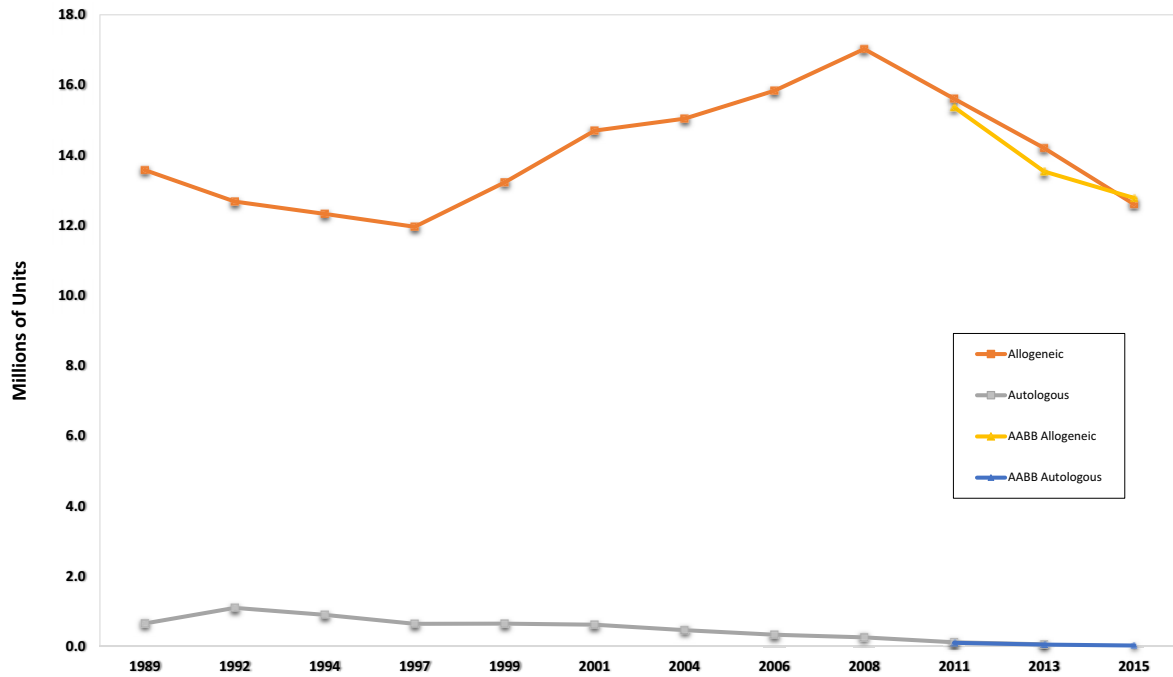
Donations of WB in 2015 totaled 11.0 million ($\pm 171,000$) units. These collections, are shown in **Table 4-2**. Allogeneic donations (including directed) totaled 11.0 million (-6.2% compared to 2013, $p < 0.001$), of which 95.2% were collected by blood centers and 4.8% by AABB member hospitals; this is comparable to 2013 when blood centers collected 95.7% and hospitals collected 4.2% of allogeneic donations.

Autologous, or self-directed, WB units totaled 26,000 ($\pm 5,000$), a statistically significant decrease of



*Units available for transfusion after excluding units rejected for unacceptable test results and reasons other than testing (eg, bag failures, QNS).

Figure 4-1. Trends in estimated blood component collections by AABB US member Blood Centers: 2013-2015.



Sources: National Blood Collection and Utilization Survey (NBCUS) reports, 1989 -2015. 2011-2015, new trend lines show collections from AABB members.

Figure 4-2. Allogeneic and autologous whole blood and red cell collections 1989-2015.

45.8% compared to 2013 ($p < 0.001$). Hospitals collected 26.9% of autologous units, compared to 20.8% in 2013.

There were only 5,200 (± 400) units reported to be distributed as WB for transfusion in 2015 by AABB member facilities, compared to a slightly higher number in 2013 (6,000 units; $p = 0.029$).

Red Blood Cell (RBC) Apheresis

In addition to WB collections, 1.8 million ($\pm 42,000$) RBC units were collected by apheresis. Total RBC apheresis collections showed a continued decline, yet smaller when compared to the drop in 2013 from 2011, of 2.1% in 2015 compared to 2013, when there were 1.9 million RBC units collected by AABB member facilities. Nevertheless, in 2015, RBC apheresis collections repre-

sented a larger fraction of the total WB/RBC collections than in previous years (14.2% compared with 13.7% in 2013). There were 907,000 RBC apheresis collection procedures, 5.1% fewer than in 2013 (**Figure 4-3**). While nearly all of the RBC apheresis collections were for allogeneic use, a small number of RBC apheresis units were intended for autologous transfusion (1,000 units).

RBC apheresis collections were performed largely in blood centers, accounting