AABB Monthly Platelet & Group O Survey

Welcome to the report of the AABB Monthly Platelet and Group O survey. If you wish to explore the survey further, please see instructions for the interactive tool.

Thank you to all those who responded to this survey. We hope that, over time, this survey will be an important source of data for AABB members and the larger transfusion medicine community. We are now moving forward with quarterly survey invitations asking participants to provide monthly data. AABB encourages all members to regularly fill out the survey, which should take no more than 15 minutes to complete. The more data we collect, the more accurate the results will be. This report includes data from June 2021 through December 2023 that you can explore using the data filters. Below we present the overview of 2023 data.

Major conclusions (Year 2023):

Collections (page 3 & 4)

- Blood collection data (page 3) represent approximately 70% of the platelet and Group O RBCs collected in the US.
- The overall collection data (page 3) and collection from nine blood centers that reported consistently (page 4) showed highest platelet collection in the month of December. The quarterly platelet collection was higher in Q4 compared with Q3 2023.
- Group O+ve collection was lower in Q4 compared to Q3 2023. In 2023, Group O+ve collection was highest in the month of April (page 3 & 4).
- Group O-ve RBC collection in Q4 was comparable with Q3 2023. In 2023, Group O-ve collection was highest in the month of March (page 3 & 4).
- The overall platelet wastage rate was comparable in Q4 with Q3 2023. The lowest platelet wastage rate was reported in the month of October (page 3). Transfusions (page 5 & 6)
- In Q4 2023, 43 new hospitals reported to the survey, as a result of new outreach. These new participant hospitals had a lower average utilization (platelet and RBC) compared with hospitals that reported to the past surveys. A new page has been added to compare hospitals that reported to all four quarterly surveys in 2023 (page 6) to evaluate the trend.
- Our data showed the overall average platelet, Group O+ve RBC and Group O-ve RBC transfusion volumes for the participating hospitals were lower in Q4 2023 (page 5). However, the same store comparison (page 6) showed slightly higher transfusion volumes in Q4 compared with Q3. In 2023, platelet transfusion was highest in the month of March (page 5 & 6).
- Same store comparison showed highest level of utilization of Group O+ve and Group O-ve in the month of October and August respectively (page 6).

• Same store comparison showed the average hospital platelet wastage rate was 8% (page 6). Hospitals without a collection facility had higher platelet wastage rate compared with those with one (page 6). Wastage rates also differ based on expiration date of platelets (e.g., short dated when received), hospital characteristics, ability to return units, canceled procedures and inventory management systems. <u>Shortage indicators (page 7)</u>

• Only 22% of the responding hospitals reported using a secondary supplier (one or more times/month) in 2023. The proportion of hospitals using a secondary supplier for their blood in Q4 (20%) was lower compared with Q3 2023.

- Fifty percent of the responding hospitals were unable to split platelets to extend their inventory in 2023. A higher proportion of hospitals reported splitting platelet units in Q4 compared with Q3 2023.
- The average proportion of hospitals in which an incomplete RBC led to either a delay in patient care or a need to split units to fill transfusion orders was slightly higher in Q4 compared with Q3 2023.

• The average proportion of hospitals in which an incomplete platelet led to either a delay in patient care or a need to split units to fill transfusion orders was lower in Q4 compared with Q3 2023. Approximately 24 - 35% of respondents did not track this information in 2023.

Hospitals Receiving Low Yield Platelets (page 8)

• In 2023, the proportion of hospitals receiving low-yield platelets was stable and within the range of 15%-19% (average=17%). On average, 16% of participating hospitals received low-yield platelets in Q4 months, lower than Q3 2023.

Please complete the permission request form to use data from this report: Click here



Year

2023

 \sim

Survey Participation Institution Type Count **Blood collection center**

AABB Monthly Platelet & Group O Survey

Thank you to all those who responded to this survey.

Methods:

• The survey is sent to more than 800 AABB-accredited hospitals and 50 AABB-accredited blood collection facilities (consolidated responses were collected for blood centers operating in more than one region).

- Basic collection and utilization information on platelet and Group O RBC numbers are collected.
- Total platelet collection is aggregate of labeled apheresis platelet units and whole blood-derived (WBD) platelets platelets. Units reported as individual WBD or pooled WBD are converted to equivalent standard pooled dose.
- Platelet wastage rate by blood collection center is the rate of labeled platelet wasted due to outdate per total platelets collected.
- Page 4 shows the collection trends using data from 9 blood centers that have been reporting consistently.
- Page 6 has been added to this report to compare data from 66 hospitals that reported to all four quarterly surveys in 2023.
- For hospitals, platelet wastage due to outdate and other reasons is aggregated.
- For hospitals, platelet wastage rate is calculated as platelet wastage rate=total platelets wasted/(total platelets wasted+total platelet transfused) [Reference 1].
- High platelet wastage rate considered as outliers (1.5 Inter Quartile Range above Q3) are removed for this survey report.
- Page 8 tracks the proportion of hospitals receiving low-yield platelets. •

Limitations:

- The survey report is a visual snapshot of survey respondents and doesn't provide national estimates.
- No data imputation or weighting procedures are applied. However, AABB does accept retrospective data and will update results as new information is received.
- Response rates vary between each monthly survey. However, the response rate from blood collection centers is consistent with an average of 17 centers reporting every month.
- The survey collects wastage data for platelet units. Blood inventory management and shortage mitigation varies based on region and facility capabilities. Variation is also reported between rural and urban regions. Regional and inter-institution variation is not currently captured in this survey.

Current Data:

• Last updated: 3/7/2024. A new field (Year) has been added to filter 2021, 2022 and 2023 data. Please use this field to view desired year/month data. Press and hold the Ctrl key for multiple selections. Members interested in providing data for past months can contact AABB via srajbhandary@aabb.org.

Reference:

1. Fredrich, N., Gammon, R., Richards, C. A., & Tauer, R. (2019). PBM Metrics. Blood Wastage-Metrics Can Precede Intervention. AABB Press.

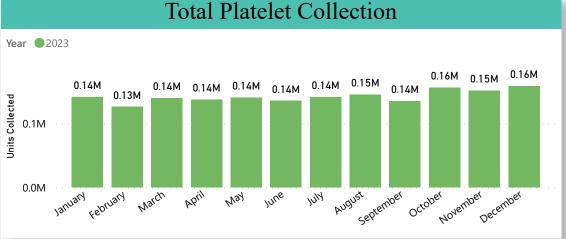
Please complete the permission request form to use data from this report: Click here

Blood collection center	
January	17
February	17
March	17
April	17
May	17
June	17
July	16
August	16
September	16
October	16
November	16
December	16
Hospital with collection facility	
January	7
February	7
March	7
April	6
May	6
June	6
July	9
August	9
September	9
October	14
November	14
December	14
Hospital without collection facility	
January	88
February	86
March	87
April	92
May	95
June	94
July	92
August	93
September	93
October	140
November	138
December	139 🚄



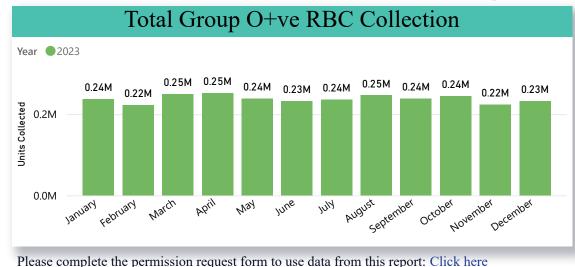
Year	\checkmark	Institution Type	\sim
2023	\sim	All	\checkmark

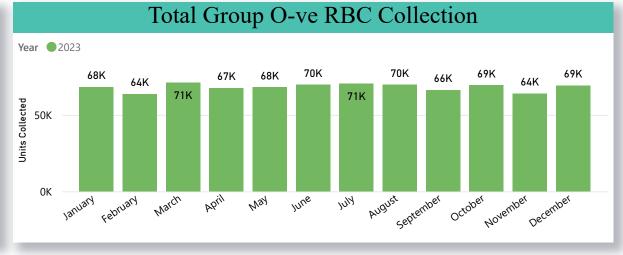
AABB Monthly Platelet & Group O Survey COLLECTION



Average Platelet Wastage Rate by Collection Centers **Year 2**023 5.1% 5% 5.3% Wastage Rate (%) 3.8% 3.3% 3.4% 3.2% 3.1% 3.2% 2.9% 2.6% 2.5% 1.9% September 0% November February June March August October January April December May JUNY

Group O Red Blood Cell (RBC)

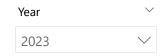




Platelet units

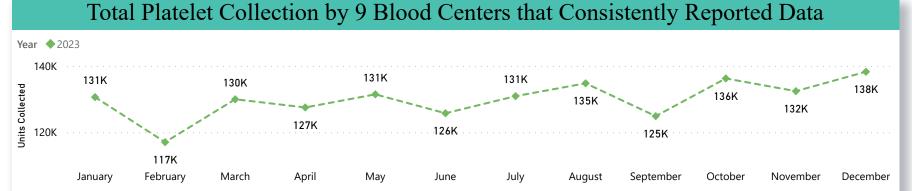


AABB Monthly Platelet & Group O Survey



Collection Data for 9 Blood Centers that Consistently Provided Survey Data

A total of 9 blood centers (representing approximately 50% of the blood supply) have consistently supplied survey data. The amalgamated blood collection data from these centers is shown below.



Total Group O+ve RBC Collection by 9 Blood Centers that Consistently Reported Data

Total Group O-ve RBC Collection by 9 Blood Centers that Consistently Reported Data



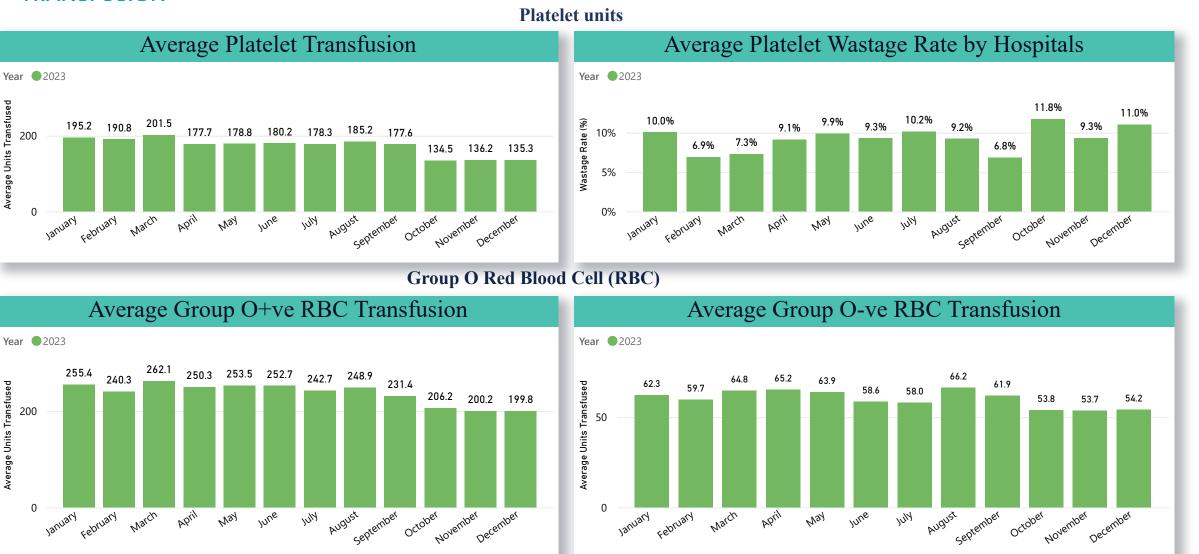


Please complete the permission request form to use data from this report: Click here



Year	\sim	Institution Type	\checkmark
2023	\sim	All	\sim

AABB Monthly Platelet & Group O Survey TRANSFUSION



Please complete the permission request form to use data from this report: Click here

5

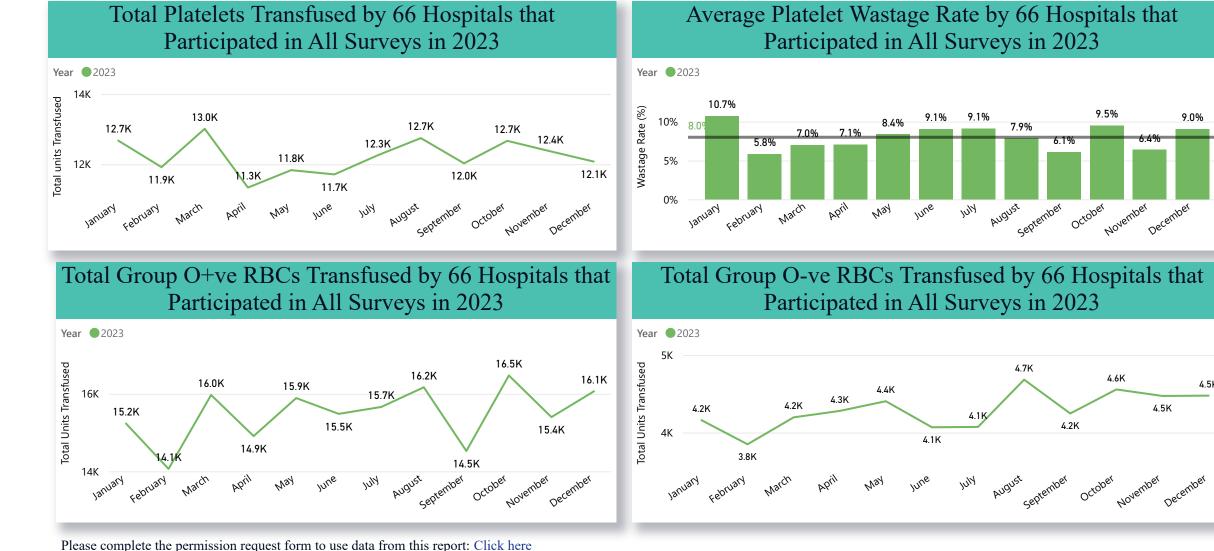


nstitution Type	\sim
All	\sim

9.0%

4.5K

AABB Monthly Platelet & Group O Survey TRANSFUSION



Data for 66 Hospitals that Participated in All Surveys in 2023

⁵



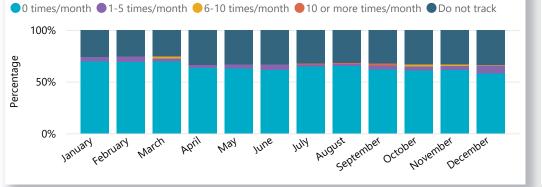
AABB Monthly Platelet & Group O Survey INVENTORY ISSUES

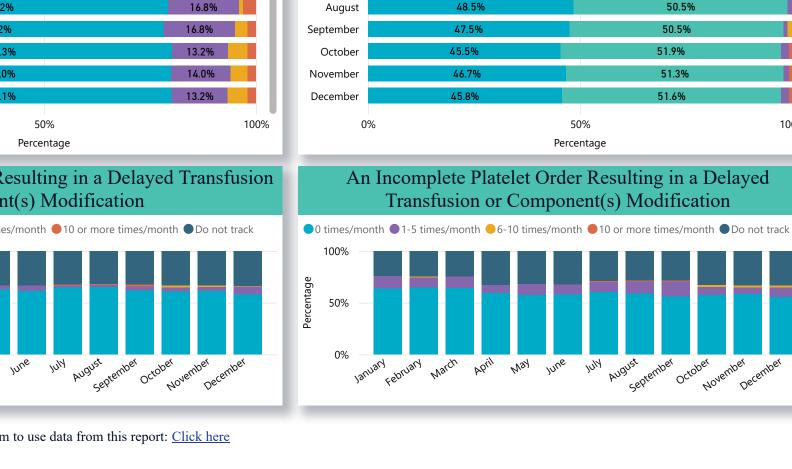
Use of Secondary Supplier

Secondary Supplier Not Used 1-4 times/month 5-10 times/month 11 or more times/month



An Incomplete RBC Order Resulting in a Delayed Transfusion or Component(s) Modification



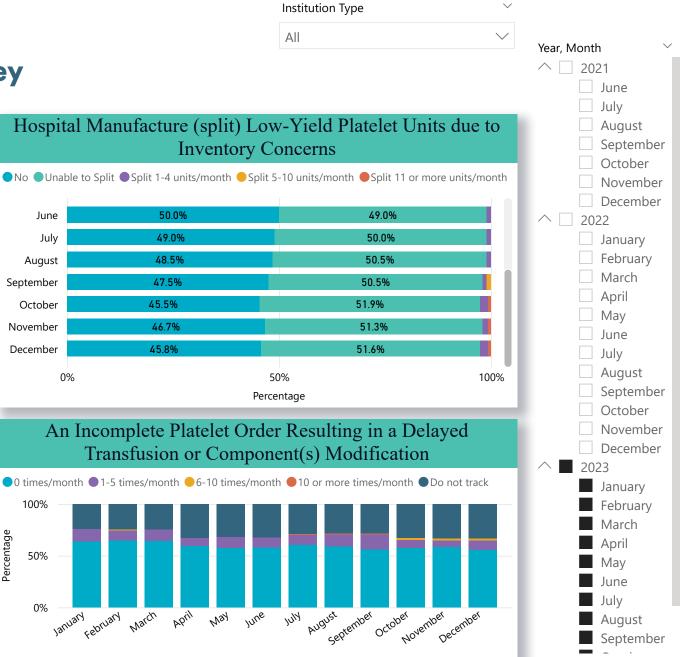


June

July

50.0%

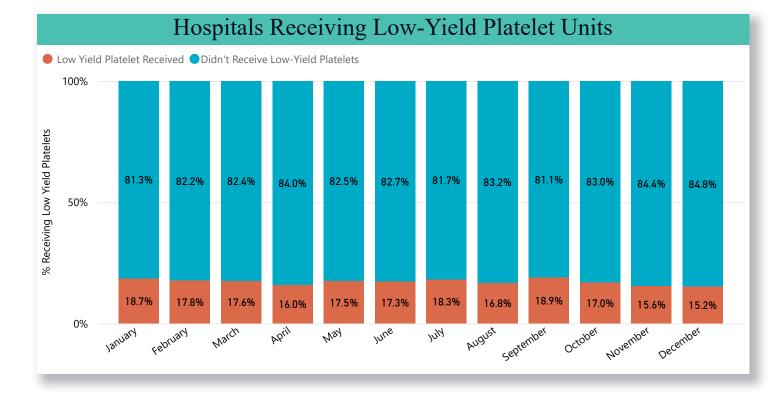
49.0%





AABB Monthly Platelet & Group O Survey

Low-Yield Platelets



Year, Month \sim ∧ □ 2021 June July August September October November December ∧ 2022 January February March April May June July August September October November December △ 2023 January February March April May June July August September October November December