2012-2017 AABB DONOR HEMOVIGILANCE

KEY NOTES

Reaction rates and the reporting protocols vary among blood collection facilities, even collection sites within the same organization.

The overall donor reaction rates ranged from 20.8 to 24.3 per 1,000 donations.

The most common reaction was vasovagal reaction without loss of consciousness.

AABB Donor Hemovigilance data represented approximately one tenth of the US blood donations*

*National Blood Collection and Utilization Survey

Source: AABB Hemovigilance System – DonorHART™ | ©AABB 2019
Figure 1. Number of Donations and Reactions reported to the AABB Donor Hemovigilance: 2012-2017

<table>
<thead>
<tr>
<th>Total Donations</th>
<th>Total Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=5</td>
<td>N=10</td>
</tr>
</tbody>
</table>

![Graph showing seasonal donation pattern among age groups](image)

**Key Notes**

Fewer donations by young donors (age 16-22) during the summer months, were compensated by donation from adult donors (age 23-69).

Younger donors were more likely to experience an adverse reaction to blood donation.

Younger donors (age 16-22) made 18% of the total donations, but accounted for higher reaction rates, ranging from 41.41 (2017) to 49.09 per 1,000 donations (2013).

There was a downward trend of vasovagal reactions with increase in donor age.

The margin between vasovagal reactions and local injuries related to needle was narrowest among donors aged 70 years and older.

Figure 2. Seasonal Donation Pattern among Age Groups: DonorHART Aggregate Data 2012-2017

- **16-22 Yr**
- **23-69 Yr**
- **70+ Yr**

![Graph showing seasonal donation pattern among age groups](image)

**Donation and Reaction Rates**

- **16-22 Yr**
  - % Donation
  - Reaction Rate
- **23-69 Yr**
  - % Donation
  - Reaction Rate
- **70+ Yr**
  - % Donation
  - Reaction Rate

![Bar chart showing donation and reaction rates by age group](image)

**Reaction Types**

- **Vasovagal**
- **Local injury related to needle**
- **Apheresis**
- **Injury**
- **Allergic**
- **Other**
- **Major Cardiovascular Event**

![Bar chart showing reaction types by age group](image)

*Among reported reactions

Source: AABB Hemovigilance System – DonorHART™ | ©AABB 2019
Although the number of donations by male donors were higher compared with female donors, female donors experienced higher adverse reaction rates, ranging from 25.64 (2017) to 30.40 per 1,000 donations (2013).

Male donors were twice as likely to experience apheresis reactions compared with female donors, making apheresis reactions the second-most common adverse reactions among this donor group.

Among female donors, local injuries related to needle were the second-most common adverse reactions.
OTHER FINDINGS

Donor History Comparison
Donation and Reaction Rates

Reaction Types

Reported Reaction Location*

KEY NOTES

Donor bed was the most common location where the reactions began.

First-time donors were more likely to experience an adverse reaction compared with repeat donors.

Apheresis reaction rates were higher among repeat donors compared with first-time donors.

Source: AABB Hemovigilance System – DonorHART™ | ©AABB 2019