

The Importance of Blood in Trauma Care

Treatment of uncontrolled bleeding has saved many lives in cases of both military and civilian trauma. Explore the latest statistics on timely blood transfusions for survival below and <u>download the U.S. Blood Donation Statistics</u> <u>and Messaging Guide for more information.</u>

The Role of Blood Donation

• Regular blood donation is crucial for maintaining the blood supply needed for trauma care. Every donation can help save lives, with a single donation potentially helping multiple trauma patients.

The Golden Hour

- The first 60 minutes after trauma (the "Golden Hour") is critical for patient survival
- Controlling severe bleeding within this time significantly improves outcomes

Trauma and Blood Loss

- Over 80% of deaths in the operating room within 24 hours of trauma are due to severe blood loss
- Hemorrhage is the most common cause of death within the first hour of arrival at a trauma center

Blood Utilization in Trauma

- 3% of civilian trauma patients receive a massive transfusion (>10 units of red blood cells in 24 hours)
- These patients consume 70% of all blood transfused at a trauma center
- A single car accident victim can require up to 50 units of red blood cells

Types of Blood Products Used

- Red Blood Cells: Carry oxygen to tissues
- Plasma: Contains clotting factors to help stop bleeding
- Platelets: Essential for blood clot formation

Gunshot Wounds and Blood Needs

- o Gunshot victims are 5 times more likely to require blood transfusions than other trauma patients
- They need 10 times more blood units on average
- Gunshot victims are 14 times more likely to die than other seriously injured patients

Blood Supply Challenges

- Only 3% of the eligible U.S. population donates blood each year
- Blood has a limited shelf life (Red blood cells: 42 days, Platelets: 5-7 days)
- Maintaining an adequate blood supply for trauma care is an ongoing challenge

Advances in Trauma Care

- Use of whole blood transfusions in severe trauma cases is increasing
- Rapid response protocols for massive transfusions have improved outcomes
- Point-of-care testing allows for more targeted blood product administration

Tourniquets and Hemostatic Agents

- Modern tourniquets have saved many lives in both military and civilian trauma
- Hemostatic agents can promote rapid clotting in severe wounds
- Public education on proper tourniquet use is increasingly important





