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## Facts about Blood and Blood Donation

1. More than 4.5 million patients need blood transfusions each year in the US and Canada.
2. Each day 43,000 units of donated blood are used in the US and Canada.
3. Someone needs blood every two seconds.
4. About 37 out of every 100 Americans are eligible to donate blood – but only 3 to 4 people actually donate each year. \*\*
5. On average, 1 out of every 7 people entering the hospital will need blood.
6. As the current standard of care, hospitals overwhelmingly choose blood donated by volunteer donors to meet the transfusion needs of their patients.
7. One blood donation may help several people.
8. Any healthy person 17 or older (or 16 with parental consent) who weighs at least 112 pounds may be eligible to donate, although females age 18 and under must weigh 120 pounds or more.
9. Women and girls receive 53 percent of blood transfusions; men and boys receive 47 percent.
10. More than 75 percent of all Americans reaching age 72 will need blood in their lifetimes; 97 percent will have a loved one or friend who will need blood.
11. There are four main red blood cell types = A, B, AB and O. Each can be positive or negative for the Rh factor. (AB+ = “universal recipient” / O- = “universal donor”)
12. Dr. Karl Landsteiner first identified the major human blood groups – A, B, AB and O – in 1901.
13. One unit of whole blood can be separated into several components: red cells, plasma, platelets, and cryoprecipitate.
14. Red blood cells carry oxygen to the body’s organs and tissues.
15. Red blood cells live about 120 days in the circulatory system.
16. Platelets promote blood clotting and can give people with leukemia and other cancers a chance to live.
17. Plasma is a pale yellow mixture of water, proteins, and salts.
18. Plasma, which is 90 percent water, makes up 55 percent of total blood volume.
19. Healthy bone marrow is constantly producing red cells, plasma and platelets.
20. Granulocytes, a type of white blood cell, roll along blood vessel walls in search of bacteria to engulf and destroy.
21. Red blood cells are in the greatest demand and you can double your impact by giving two units of red cells (double red donation) in one visit by donating on Alyx automated collection devices.
22. Apheresis is a special kind of blood donation that allows a donor to give one specific blood component, such as platelets or plasma.
23. Forty-two days = how long most donated red blood cells can be stored (refrigerated).
24. Five days = how long most donated platelets can be stored (must be stored at room temperature).
25. One year = how long frozen plasma can be stored.
26. Whole blood can be donated every 56 days, plasma and platelets every 28 days, and double red cell donations every 112 days.
27. Three units is the amount of the average red blood cell transfusion.\*

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28. Children being treated for cancer, premature infants, and children having heart surgery need blood and platelets from donors of all types, especially type O.
29. Anemic patients may need blood transfusions to increase red blood cell levels.
30. Cancer, transplant and trauma patients, and patients undergoing open-heart surgery may need platelet transfusions to survive.
31. Sickle cell disease is an inherited disease that affects more than 80,000 people in the US, 98% of whom are of African descent.
32. Many patients with severe sickle cell disease receive blood transfusions every month.
33. A patient who needs an organ transplant could be forced to pass up lifesaving surgery if compatible blood is not available to support the transplant.
34. Fourteen separate tests (11 for infectious diseases) are performed on each unit of donated blood.
35. Seventeen percent of people who don't give blood cite "never thought about it" as the main reason for not donating, while 15 percent say they're "too busy".
36. The number-one reason blood donors say they give is that they "want to help others."
37. Shortages of all blood types are most likely to occur during the summer and winter holidays.
38. Many US blood banks often run short of types O and B red blood cells.
39. White cells are the human body's primary defense against infection.
40. There is no substitute for human blood.
41. The average Michigan Blood donor gives less than twice a year – but just one more donation would help greatly. If all blood donors gave three times a year, blood shortages would be rare.
42. If just one more percent of all Americans would give blood, blood shortages would disappear for the foreseeable future.
43. You could donate 47 gallons if you began donating at 16 and donated every 56 days until you're 79.
44. Four easy steps to donate blood: Medical history, quick mini-physical, donation, and brief snack/rest period.
45. Donating whole blood usually takes just 7-10 minutes. The entire process, from sign-in to sign-out, takes 45-60 minutes.
46. After donating blood, your body replaces fluid volume within hours, while red cell and platelet replacement takes several weeks.
47. You CANNOT get AIDS or any other infectious disease by donating blood.
48. The average adult body contains 10 pints of blood.
49. One unit of donated whole blood = (roughly) one pint.
50. Blood makes up about 7% of your total body weight.
51. A newborn baby has about one cup (8 fluid ounces) of blood in his or her body.
52. Giving blood will not decrease your strength.
53. Any company, community organization, place of worship, or individual may contact Michigan Blood to host a blood drive: call toll-free 1-866-MIBLOOD (642-5663).
54. Blood drives hosted by companies, schools, places of worship, and civic organizations supply roughly half of all blood donations across the US.
55. Blood types of the general population:
 

38% are O+	34% are A+	9% are B+	3% are AB+
7% are O-	6% are A-	2% are B-	1% are AB-
56. In the days following the September 11, 2001 terrorist attacks more than 500,000 Americans donated blood.

\*\* Riley, et al. The United States' potential blood donor pool: estimating the prevalence of donor-exclusion factors on the pool of potential donors. *Transfusion* 2007.

\* The 2007 National Blood Collection and Utilization Survey Report, US Department of Health & Human Services



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 MI blood saves lives.™