

Suncoast Communities Blood Bank (SCBB) is an independent, not-for-profit organization that, as a community first responder, provides all blood products required by select medical facilities in southwest Florida. Our mission is to provide a reliable supply of the highest quality blood products and services. In addition to collecting over 33,000 units of blood annually, SCBB provides a wide range of blood services to several hospitals and medically-ordered therapeutic blood procedures to outpatients and inpatients throughout the region.

### **A Distinguished History: 62 Years of Providing Blood**

When O.K. Fike and Dr. Millard White founded the Lower West Coast Blood Bank, now known as Suncoast Communities Blood Bank, in February 1949, they planted the seeds of a humanitarian idea that would blossom over five decades. For more than 60 years, tens of thousands of dedicated volunteers have provided the critical, life-saving gift of blood to our local hospitals and patients. In 1949 the Blood Bank collected 551 pints of blood, now called “units.” Today, more than 1,300 blood drives are held annually in our community, and over 33,000 units of blood are collected. The success of this organization rests completely on the generosity of volunteer donors.

### **Highest Safety Standards**

While reliance upon donations has not changed, the technology involved with blood banking has experienced incredible transformation. Safety of the blood supply has evolved to unprecedented levels. Strict federal regulations assure that blood products maintain the highest quality. That means a thorough screening of donors, extensive testing of each unit and numerous other mandatory compliance checks. SCBB operates within full compliance of the U.S. Food and Drug Administration (FDA), consistently earns accreditation by the Association of American Blood Banks, and maintains membership in America’s Blood Centers. Our blood supply has never been safer. SCBB has recently incorporated new FDA-approved blood management software that tracks each individual unit of blood from the time of collection, through testing, matching and actual patient transfusion. This provides comprehensive safety assurance. SCBB’s system sets the standard for the highest level of blood compatibility and safety monitoring.

### **Technological Advances**

Changes in technology have resulted in new instruments that improve blood collection. Today, donors can give specific components of blood, utilizing instruments that are calibrated to each donor’s physical make-up. This breakthrough technology, called apheresis (a fur e sis), allows donors to give additional blood products, reduces the time it takes to donate, increases comfort for the donor and results in fewer - if any - side effects. Apheresis is an automated system that resembles a small centrifuge that collects and separates the blood while the donation is taking

place. It allows SCBB to provide its hospitals with more consistent and safer blood components while affording donors a more comfortable experience. Most importantly, apheresis allows donors to donate twice as much blood, half as often – something no one would have envisioned when blood banking first began. Many of these technological changes have been integrated into the traditional symbol of blood donation – the bloodmobile. SCBB has purchased two new bloodmobiles and retrofitted others to provide for new technological advances, to be more convenient for donors and to maintain a state-of-the-arts program for the community.

### **The Next Generation**

While the blood supply is the safest it has ever been, blood banks face a serious challenge - how to address the ever shrinking pool of eligible donors. This pool of eligible donors is dwindling at a staggering rate, while population and demand continues to grow. Only 38 percent of the US population is eligible to donate blood. And with anticipated demographic changes, that percentage is likely to drop even more. The population of eligible blood donors is reduced, based on exclusions due to high-risk behaviors for transmitting infectious diseases, travel to areas with special disease exposures, presence of chronic diseases, use of medications, and aging. The dramatic impact of these exclusions is intensified by the loss of the WWII generation. This "Greatest Generation," those who established blood banks in the 1940's, believed wholeheartedly in donating blood as a civic and patriotic duty. "Baby Boomers" are rapidly approaching the age at which they will require transfusions, and their successors, the "Gen Xers," do not give as often as their parents and grandparents. New technologies cannot fully compensate for the diminishing numbers of donors. Cultivating the next generation of blood donors is the new challenge facing blood banks.

### **We Can't Operate Without You**

Technological advances are quickly changing the landscape in blood banking. For example, research is currently being conducted to create artificial blood to be used as a temporary substitute until real blood can be transfused. Further out, it is likely that individuals will be able to have their own blood cloned for future use. Other research is directed toward converting blood types on hand (i.e., converting A or B blood to type O) to meet the specific blood type needs and thus preventing blood shortages. While these new technologies may help to stabilize the response to the ebb and flow of demand, there is no true substitute for human blood.