

Simply Safe

Providing safety for the needle that saves lives

by Ron Stoker

One in 10 people entering a hospital needs a blood transfusion. Transfusion therapy is the administering of the specific blood component or components that the patient requires such as red blood cells, platelets or plasma. Patients may require transfusion for acute bleeding due to trauma or surgery; secondary to treatments for cancer, hematological malignancies, as well as a number of other disorders. Patients who have sustained extensive burns to their body, or those with severe

anemia often require transfusion. On any given day an average of 38,000 units of red blood cells are needed for hospital patients in the United States. The available blood supply must meet these anticipated daily needs as well as provide assurance that we are prepared for any unexpected disasters or emergencies. In order to meet these needs, blood donations must be made in advance to allow time for testing, processing and matching the blood for the specific patient who requires transfusion. Volunteer blood donors and the many dedicated healthcare professionals who work in the field of transfusion medicine ensure that there is enough blood available whenever and wherever it is needed.

The people who donate blood are the many women and men who respond to the call to volunteer and give blood to save a life. In the United States, more than 14 million blood donations are given per year. The healthcare professionals who collect this blood encounter multiple donors each day. Donated blood is collected into blood bags with an integral 16-gauge needle. Donors go to blood centers and hospital donor rooms to donate; however, the majority of donor blood is collected at blood drives set up in businesses, schools, houses of worship, organization or club lodges and even shopping malls. Going to the donor is vital in making the donation process convenient for the donor. This sometimes means that the blood drive set up is confined to a limited space and staff work close together. Safety for all staff and donors is of paramount importance when setting up the blood drive layout, equipment and supplies. The use of safety devices to prevent injury reinforces the measures taken to provide a safe environment.

Figure 1.

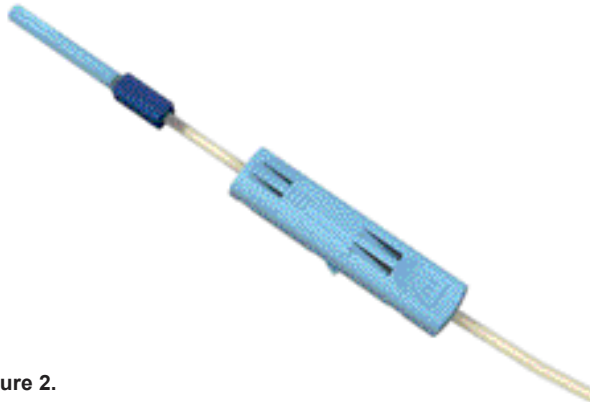
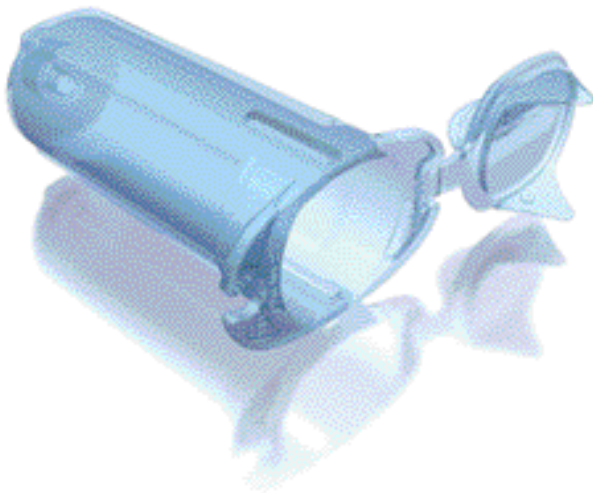


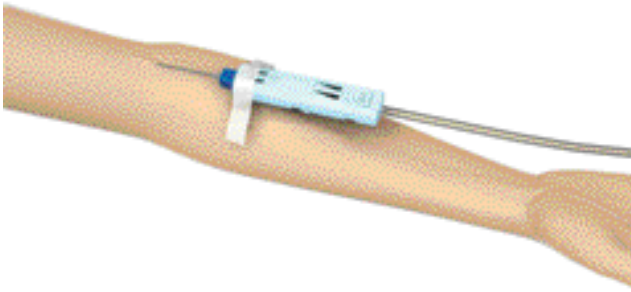
Figure 2.



Blood Collection Safety Devices

Two such safety devices to protect blood collection professionals are the ITL (Innovating Technologies for Life) DonorCare® Needle Guard (Figure 1) and SampLok® Tube Holder (Figure 2). These devices provide safety from accidental needlestick injuries that could occur from the blood bag needle or the sampling needle (the luer needle in a sampling port that facilitates collection of

Figure 3.

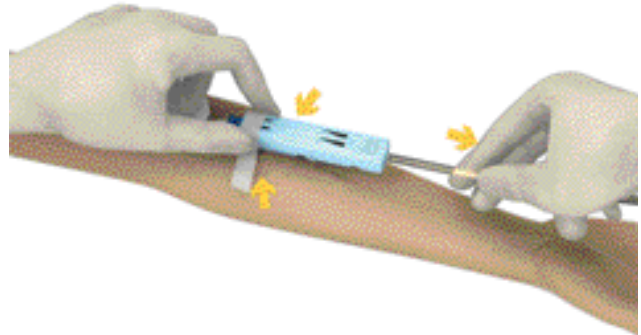


donor samples for the required testing). The DonorCare has gained widespread acceptance, and most donated blood collected today employs this safety device whether the blood is collected in a blood center, at a mobile set up, on a blood mobile or in a hospital blood donor room.

The DonorCare shields the blood bag needle on withdrawal so that there is never an exposed needle to handle and dispose. The procedure for use easily incorporates into existing procedures. The DonorCare is positioned on the needle hub during the blood donation (Figure 3). When it is time to remove the needle from the donor's vein, the DonorCare is held in place as the tubing behind the needle hub is quickly pulled and the needle locks in the DonorCare (Figure 4). Because the procedure does not require any special techniques or additional steps, needle withdrawal is safe and swift even in emergency situations.

The SampLok tube holder, when attached to the blood bag sampling port, provides two levels of protection. The SampLok with an attached sampling luer needle allows donor

Figure 4.

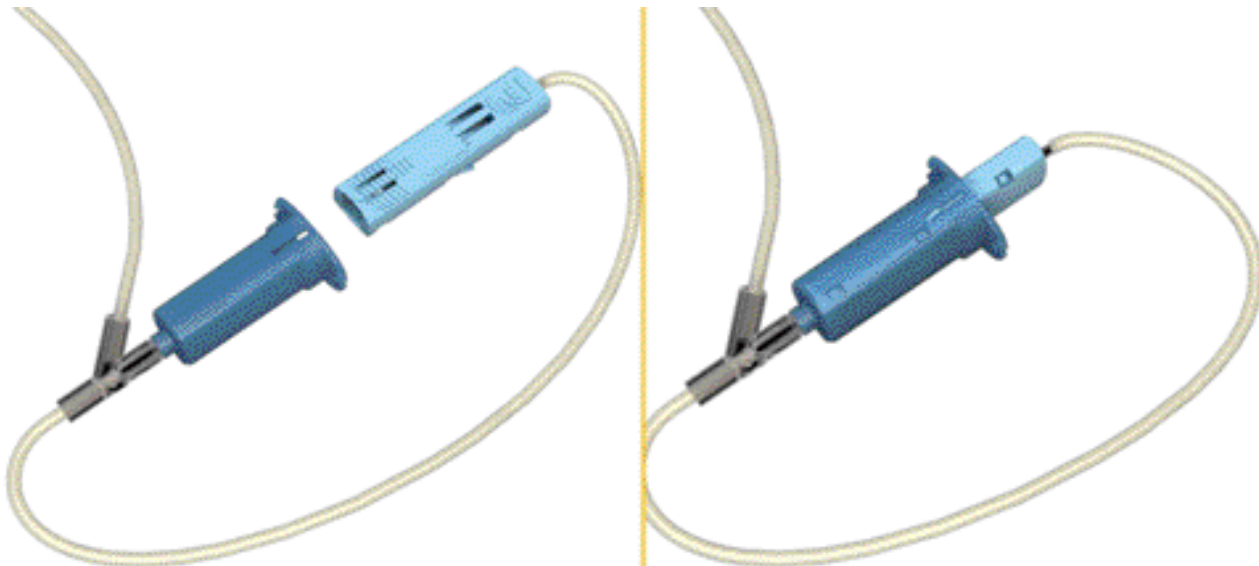


samples to be collected into vacuum tubes without an exposed needle. Another feature is the SampLok is available with a hinged safety lid that securely closes before and after sampling is complete, preventing exposure and accidental injury from the sampling luer needle. The SampLok provides a second level of protection by locking in the DonorCare that contains the shielded blood bag needle, creating a double shield around both the blood bag needle and the sampling luer needle (Figure 5). The DonorCare and SampLok have been evaluated by the independent review and nonprofit organization, ECRI. The complete review and rating may be found in the 2nd edition of *Sharps Safety and Needlestick Prevention*.¹

A customer recently began using the DonorCare needle guard at their facility this past July and has routinely used it since that time. The customer has reported: "Staff are finding them very easy to work with, they actually really like the DonorCare. The staff had little difficulty with the training or techniques for use."

The effectiveness of the DonorCare has been proven

Figure 5.



The DonorCare and SampLok tube holders are simple safety devices that provide protection against accidental needlestick injury.

over the years that it has been in use. The DonorCare is easy to use, the technique is not difficult to learn and the procedure steps easily fit into existing procedures. Training does not require a large amount of resources. The manufacturer offers a training video and animation as well as a template procedure for use to help facilities incorporate these safety devices into their procedures.

Although the collection procedure employed for most blood donated today utilizes the DonorCare needle guard, there are still some blood donations performed without the use of a safety device. All facilities, regardless of size or number of blood donations collected, should incorporate this simple safety device into their operations to protect workers from the risk of injury from the needle on blood donor bags. And the SampLok provides protection from the luer sampling needle and may be used to lock in the used DonorCare, creating a secure safety unit from both the donor and sampling needle.

The DonorCare and SampLok are not just for use with blood donors. They may be used in clinics and physician offices that provide therapeutic phlebotomy blood collection procedures for patients. The procedure for use is the same as that used with donors and will easily fit into the procedures employed at the facility. This simple measure offers safety and protection to the staff from the risk of needlestick injury. The DonorCare and SampLok may even be used by cord blood banks. The cord blood is collected into a blood donor bag then processed to separate and harvest stem cells.

The SampLok tube holder is not just for use with blood donors or blood bag sampling port collection procedures. It may also be used to collect venous blood samples for clinical laboratory testing. There are a number of options available to provide safety and meet the needs of the facility. Options include:

- ▶ hinged safety lid that securely closes before or after blood sample collection to protect against a needlestick from the sample needle on the blood draw needle;
- ▶ sterile, individually packaged holders with pre-attached luers;

- ▶ blood culture bottle holder with a hinged safety lid to facilitate sampling the patient's blood directly into the bottle.

The DonorCare and SampLok tube holders are simple safety devices that provide protection against accidental needlestick injury. The devices are easy to use, fit into blood collection procedures without requiring a large amount of work or procedure changes and may be used by blood donor centers, cord blood banks as well as clinical healthcare facilities. For more information on this product or IITL Corporation, visit the company's Web site at www.itlcorporation.com. †

Reference

1. Sharps Safety and Needlestick Prevention, 2nd ed. ECRI 2003; 90-92.

Ron Stoker is the founder and executive director of ISIPS, the International Sharps Injury Prevention Society, and is a frequent contributor to Managing Infection Control magazine. He speaks frequently at national and international meetings on sharps safety, hand hygiene and infection control issues. He is coauthor of the "Compendium of Infection Control Technologies." For more information on the Compendium, go to www.medicalsafetybook.com. Mr. Stoker is providing a number of webinars focusing on a variety of sharps injury prevention safety products. For more information on the webinars, go to www.isips.org/seminars.html.