

## Transshipment center Airmen pump blood from the 'heart'

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11/26/2007 - **SOUTHWEST ASIA (AFPN)** -- When U.S. or coalition forces or civilians are wounded as a result of battle, they are transported to the nearest medical facility to receive treatment. In some cases, the wounded person may require some sort of blood product to save his or her life.

That's where the Airmen in the 379th Expeditionary Medical Group's blood transshipment center come in. Acting as a hub, the BTC staff processes anywhere from 1,000 to 1,500 units of blood product each week, valued at more than \$275,000, which they inspect, process and store until it is shipped forward.

"Ninety-five percent of the blood we receive is donated from military members through the military blood program," said Tech. Sgt. Jason Lewison, 379th EMDG, deployed from Minot Air Force Base, N.D.



"On very few occasions, the Department of Defense will have to purchase blood products from the American Red Cross or civilian blood banks in the event that the military blood program isn't able to fully support one or more blood types."

Capt. Ramos-Ortiz, who is deployed from Langley AFB, Va., explained that the BTC here receives, processes, stores and distributes all of the blood products used throughout the AOR.

Donated blood products are sent through the Armed Services Whole Blood Processing Laboratory East at McGuire AFB, N.J. and then to Dover AFB, Del.

The next stop is Ramstein Air Base, Germany, and finally the blood products arrive here where members of the BTC, along with volunteers from various units across the installation unpack and inspect each product for any deficiencies.

"Just like the heart pumps blood throughout the body, we 'pump' our blood products throughout the AOR where they are either used or further distributed as needed," the captain said.

BTC Airmen store and ship three different types of blood products; red blood cells, fresh frozen plasma and cryoprecipitate. Red blood cells are the most common type of product used, Captain Ramos-Ortiz said.

At times, wounded individuals do not require all of the elements in a red blood cell pack. In such cases, they are given either fresh frozen plasma or cryoprecipitate.

Fresh frozen plasma is used when a patient requires the different substances contained in plasma but does not necessarily need the red blood cells themselves.

Cryoprecipitate contains coagulating factors pulled from plasma and is used in the event that a patient is bleeding so severely and the blood is unable to clot and he or she continues to bleed no matter how much new blood is transfused.

"Red blood cells are kept in our cooler at 40 degrees Fahrenheit," said Tech Sgt. Joseph Pinkney, 379th EMDG, also deployed from Langley AFB. "They have a shelf life of 42 days from the date the blood is drawn.

"The fresh frozen plasma and the cryo can actually be frozen solid and stored for one year before they expire," Captain Ramos-Ortiz said.

"We are expecting frozen red blood cells in January. Glycerin is used in this freezing process as normal freezing will cause the red cells themselves to burst and spoil the unit," he said.

When it's time to ship red blood cells, they are packed in special boxes with regular wet ice. Regular ice is used so the red blood cells do not get too cold. Once the red blood cells get too cold, the cells will actually explode, making the unit unusable.

Fresh frozen plasma and cryoprecipitate are packed in the same boxes except they are packed in dry ice which will keep them frozen.

Once packed, all these blood products must be re-iced every 48 hours to prevent spoilage. Once the shipment has been assembled, it is taken to the flightline where it is stored in a large cooler where it will await transport.

"Our mission here is one of the more important missions in the AOR," said Senior Airman Thomas Sullivan, 379th EMDG, deployed from Langley AFB. "The blood products we send out are critical to saving the lives of our fellow U.S. and coalition forces.

"We also make a huge impact on the civilian populations near our forward units. A lot of the products we send are used to treat wounded civilians."

"This entire team is on call 24/7," the captain said. "We have scheduled shipments throughout the week.

"We determine shipments based on monitoring blood supplies throughout the AOR," he said. "This ensures our forward units have the supply of blood they need to maintain operations and keep our soldiers alive. We are also ready to fill emergency requests at a moment's notice."

During one particular incident recently, a phone call came in early one morning with a request for blood for a severely wounded Marine.

"Immediately I called my team in and without one complaint everyone moved to rapidly process the request," Captain Ramos-Ortiz recalled.

The Marine's injuries were so severe that medical personnel on-scene performed the transfusion right on the aircraft," he said.

"That's one of the greatest things for us to hear," said Senior Airman Beth Gunn, 379th EMDG, deployed from Langley AFB. "We know that with every unit of blood we ship, we are helping save someone's life.

"Working in the BTC is a very unique and rewarding opportunity for us," Captain Ramos-Ortiz said. "We are very proud of the work we do here."