



Featured column

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AMEDD Health Care Ready For Future Challenges

By Lt. Gen. Kevin C. Kiley, MC, USA

Army Surgeon General and Commander, U.S. Army Medical Command

Rapid Insertion Of Doctrine And Technology

Following the Army's lead, we have taken the Rapid Fielding Initiative and added a medical flare.

Examples of this effort include...

Our researchers developed the "Golden Hour" Blood Transport Container, which can keep four bags of red cells for 72 hours with no electricity or ice. It is used on evacuation missions, far forward on the battlefield. The container, a nearly 10-inch square box that needs no power source to maintain its internal temperature, uses a combination of the vacuum-insulated panels and an internal container that has a liquid phase-change material, like the reusable freezer packs people toss in coolers. The black, internal portion of the container is put in a refrigerator or freezer for at least two hours, then is put back in the container along with the units of red blood cells and the lid is put on. The container, which has a strap for carrying and holds four units of red blood cells, weighs 10 pounds when full. The point of the box is for the medic to have blood with him, ready to use when he needs it. How long the blood stays useable in the container depends on the outside temperature. In tests run at the Blood Research Department, when the outside temperature is minus nine degrees Fahrenheit (below freezing), the red blood cells stayed good for more than 97 hours; at 105 degrees Fahrenheit, they're good for more than 78 hours; and at room temperature, they can last 121 hours. They can also be used to transport biologicals, vaccines, reagents, etc.



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