



# Best Practices Guide for Selecting Blood Bank Refrigerators

Important guidelines to consider when purchasing a refrigerator for blood storage.



# Important Guidelines to Consider

In order to meet AABB Standards and to implement best practices for blood storage, there are important considerations for the design and features of a Blood Bank Refrigerator. The following checklist can help ensure all critical aspects are considered when selecting a refrigerator for blood storage.

Storage devices shall have the capacity and design to ensure that the proper temperature is maintained. (AABB Standard 3.6.1)  
Whole blood and red blood cell components should be stored from 1°C to 6°C (AABB Reference Standard 5.1.8A).

- The refrigerator is designed to support a set point of 4°C
- The refrigerator is designed with a heavy-duty, forced-air refrigeration system
- The temperature uniformity of the refrigerator is +/-1°C

Storage temperatures of refrigerators, freezers, and platelet incubators shall be monitored. (AABB Standard 3.6.2)

- The refrigerator's controller monitors the temperature inside the cabinet and high or low temperature alarms activate if the temperature exceeds or falls below the alarm limits
- Other factors that could impact the temperature, such as door openings and power failure, should also be monitored with alarms

For storage of blood or blood components, the temperature shall be monitored continuously and recorded at least every 4 hours. (AABB Standard 5.1.8.1.3)

- The refrigerator's controller constantly monitors the temperature inside the cabinet
- The refrigerator has a chart recorder that records the temperature inside the cabinet
- The refrigerator should be designed with remote alarm contacts and a probe port to enable monitoring and recording with 3rd party systems

# Additional Considerations for Best Practices

- The refrigerator is designed with self-closing doors
- The refrigerator has liquid-tight drawers to contain spills and maintain the integrity of other stored products
- The refrigerator has glass doors and adequate lighting to view stored products without opening the door
- The evaporator fans shut off during door openings to maintain stable temperatures

Blood Bank Refrigerators from Helmer Scientific are designed for the critical demands of blood storage. The use of Helmer refrigerators supports hospitals and blood centers in their efforts to meet regulatory requirements. They are also designed to facilitate best practices for blood storage.

Reference: AABB, Standards for Blood Banks and Transfusion Services, 30th Edition

The background of the advertisement is a photograph of a refrigerator. The refrigerator is open, revealing several shelves filled with clear plastic bags containing a reddish liquid, likely blood. The bags are organized and appear to be in a clinical or laboratory setting. The lighting is somewhat dim, and the overall color palette is muted, with the red of the liquid providing a focal point. The text is overlaid on a dark teal background that covers the central portion of the image.

# Need a refrigerator for blood storage?

Whether it's an undercounter, upright, or pass-thru refrigerator, Helmer Scientific is ready to provide you with the right solution for your blood bank.

Contact a Sales Representative