

## **Impact of Coronavirus (COVID-19) on the Blood Supply for Northwestern Medicine**

The regional and national blood supply may be potentially severely impacted by the coronavirus emergency. As public concern grows and there are widespread closures of schools, businesses, places of worship and other community facilities, blood centers are confronting many blood drive cancellations and difficulties recruiting donors to come to collection facilities.

Because of this situation, our main blood supplier for NM, Versiti Blood Services (formerly known as Heartland Blood Centers) has requested that all hospitals reduce blood bank inventories of RBCs, plasma, platelets and cryoprecipitate to 75% of our normal levels. Also, they may not always be able to totally fill our routine daily standing shipments.

Accordingly, all NM transfusion services are monitoring their blood supplies and communicating closely with Versiti. We ask that all transfusions be carefully considered and comply with accepted guidelines, barring medically necessary exceptions. The following guidelines are excerpted from the Blood Transfusion Committee-approved policy at Northwestern Memorial Hospital and are generally consistent with recommendations from Versiti Blood Services and the AABB (American Association of Blood Banks).

Recommended hemoglobin thresholds for RBC transfusions in anemic patients not actively bleeding: Hgb <7 g/dL in asymptomatic non-cardiac patients and hemodynamically stable critically ill patients, or Hgb <8 g/dL and orthopedic or cardiac surgery, other clinically significant cardiopulmonary disease, acute neurologic injury or stem cell transplants.

For stable anemic patients, one RBC unit at a time should be given with clinical reassessment before additional units are given.

### Plasma:

INR >1.6 with bleeding or invasive procedure

Emergency warfarin reversal should employ four-factor prothrombin complex concentrate [KCentra®] instead of plasma.

### Recommended Platelet count thresholds for transfusion:

Platelet count <10,000/uL (prophylactic)

Platelet count <20,000/uL and central venous catheter placement

Platelet count <50,000/uL with active bleeding or invasive procedure, or

Platelet count <100,000/uL and central nervous system bleeding or procedure

Each unit of platelets gives an immediate 25-30,000/uL increment in an average-sized non-refractory adult, and only the minimum number of units needed should be given unless the post-transfusion platelet count is insufficient.

Cryoprecipitate:

Fibrinogen <100 mg/ml and bleeding or invasive procedure

Fibrinogen <200 mg/dl with trauma, cardiac surgery or obstetrical patients

Each adult dose (5-pool) of cryo contains approximately 1200 mg of fibrinogen, which is enough to raise the average-sized adult's fibrinogen level by 40 mg/dl, subject to bleeding effects on fibrinogen levels.

We wish to emphasize that there is NO evidence that coronaviruses are transmitted by blood transfusion.

The NM transfusion services will be monitoring our blood supply and demand carefully. If further conservation measures are needed, these will be developed in conjunction with medical leadership and communicated accordingly.

For questions, please contact Glenn Ramsey, MD, Blood Bank Medical Director, NMH ([gramsey@nm.org](mailto:gramsey@nm.org)), 312.926.3082

To schedule for a blood donation please visit the Versiti, Inc. website at:  
<https://www.versiti.org/ways-to-give/our-communities/illinois>