



## MEMORANDUM

**TO:** Clinical Staff, HHS and SJH

**FROM:** Dr. Menaka Pai, Transfusion Medicine Quality Lead

**DATE:** February 28, 2015

**RE:** Provision of O Rh negative uncrossmatched blood

---

Dear Colleagues,

As of March 1st, the Hamilton Regional Laboratory Medicine Program (HRLMP) will be formalizing its approach to the provision of blood in situations where ABO and Rh testing of the patient is incomplete. This situation is commonly referred to as the provision of “uncrossmatched” or “emergency issue” blood.

There is a chronic shortage of O Rh negative red blood cells (RBCs) in Canada. This mandates the judicious use of O Rh negative RBCs so they can be given to patients who truly need them. True need for O Rh negative RBCs exists in O Rh negative patients, particularly women of childbearing age who could potentially be exposed to the Rh antigen during a future pregnancy. Recently, Canadian Blood Services, the Canadian Society for Transfusion Medicine, and the American Association of Blood Banks released statements on evidence-based use of O Rh negative RBCs. These statements have led us to formalize our local policy.

**As of March 1st, if ABO and Rh testing of the patient is incomplete, we will only provide uncrossmatched O Rh negative RBCs to pediatric patients (aged 17 and under) and to females aged 49 and under. Uncrossmatched O Rh positive RBCs will be provided to males aged 18 and over and females aged 50 and over, until their testing is complete.** This minimizes the risk that an O Rh negative woman of childbearing age will be sensitized to an Rh antigen during an emergency transfusion. It also allows us to provide O Rh positive blood to adult males and women not of child-bearing age, as the rate of Rh alloimmunization in these groups is low, and the clinical consequences are not as significant. **To help us switch to crossmatched blood quickly, ensure that you send a group and screen on *all* patients needing blood, as soon as possible.**

*Note that the age at which a woman is deemed to be of child-bearing potential has been set at 49 and under.* This is based on Canadian Institute for Health Information data on child-bearing age from 2007 to 2013 demonstrating that in our LHIN, 99.5% of births are to women less than 45 years of age.

We look forward to bringing our practices surrounding the emergency use of O Rh negative blood in line with best evidence, and the standards set by national and international transfusion medicine bodies. The HRLMP's revised policy on the provision of uncrossmatched blood recognizes the need to provide the safest possible blood in emergency situations, while also preserving O Rh negative RBCs for patients who truly need them. If you have any questions about this policy, please contact me at [mpai@mcmaster.ca](mailto:mpai@mcmaster.ca)