



**American
Red Cross**

Empower GROUP O CARE

Stewardship Tip: **Safe Choices**

Quick Fact

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Overall risk of anti-D alloimmunization when using O positive for emergencies is between 3% and 6%, as most patients are Rh-positive.¹

Evidence supports that administering Rh-positive blood or whole blood in emergencies is low risk.¹

TIP

Develop policies for follow up of Rh-negative patients after Rh-positive transfusions.

Contact your Red Cross Medical Director to Learn More

Does your hospital have a policy for follow up with Rh-negative patients after Rh-positive transfusions including when to consider administering Rhlg prophylaxis, protocols for performing repeat antibody screening to evaluate for development of anti-D antibodies, and education for patients who become alloimmunized?

- Evidence supports that transfusing Rh-positive blood or whole blood in emergencies is low risk.¹
- Alloimmunization is a risk with any transfusion, even with O negative blood. The risk of anti-D alloimmunization in a Rh-negative patient after Rh-positive transfusion is 21-26% and is much lower in immunosuppressed bone marrow and organ transplant patients, including during liver transplant.^{1,2}
- In emergency uncrossmatched transfusions, the risk of a non-ABO hemolytic transfusion reaction is less than 1%, and is usually mild.³
- Evidence supports that exposure to a greater number of Rh-positive units does not increase alloimmunization risk.⁴

1. <https://www.aabb.org/docs/default-source/default-document-library/resources/association-bulletins/ab19-02.pdf>

2. Juhl D, et al. RhD-negative red blood cells can be saved during liver transplantation in RhD-negative patients due to low risk of alloimmunization against RhD. *Transfusion*. 2025;65:50-57.

3. Selleng K, et al. Emergency transfusion of patients with unknown blood type with blood group O Rhesus D positive red blood cell concentrates: a prospective, single-centre, observational study. *Lancet Haematol*. 2017 May;4(5):e218-e224.4.

4. Seheult JN, et al. Rate of D-alloimmunization in trauma does not depend on the number of RhD-positive units transfused: The BEST collaborative study. *Transfusion*. 2022;62:S135-S192.