

# WHAT ARE TRANSFUSION ADVERSE EVENTS?

## Transfusion Fact Sheet Volume 5, Number 3 By Jenita Allen

#### What is a transfusion adverse event?

A transfusion adverse event is a negative response to receiving blood or a blood component. Most of these reactions occur within 24 hours of receiving a transfusion.

#### Are transfusion adverse events common?

No. Fortunately, adverse reactions are not common. The most common reaction is a mild fever, which occurs in less than one in one thousand transfusions. The relative risk of transfusion graph, which you can see on mytransfusion.com.au, outlines low risk of some adverse events. The image (right) is an abridged version of that graph.

#### What are mild transfusion adverse events?

Most transfusion adverse events are mild and can be easily treated. These reactions include itching, fever, hives and rash.

#### What are severe transfusion adverse events?

Severe reactions are very uncommon but may be lifethreatening. They may include breathing difficulties, high fever and shaking, low blood pressure, dark urine and aches and pains.

#### What can cause breathing difficulties?

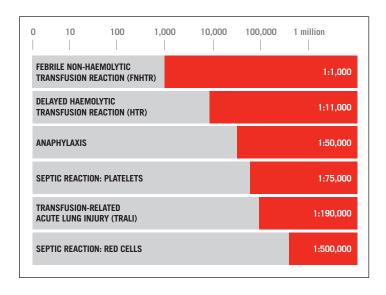
Difficulty breathing, wheezing and needing oxygen can be caused by severe allergy (anaphylaxis), bacterial infection, red cell breakdown, or TRALI (see our fact sheet *I Need to Know About TRALI*, Vol 1, No 9).

#### How can you get anaphylaxis from a transfusion?

Some people have special antibodies (attack molecules), which can react with blood proteins leading to breathing problems, swelling of the mouth and throat, and low blood pressure. This can be treated with adrenaline, the active ingredient in an 'epi-pen'.

## Can you tell me about the other severe adverse transfusion reactions?

If a patient is accidentally given incompatible blood, they will react strongly by destroying all the transfused cells (called 'haemolysis'). This causes fever, aches, pains, low blood pressure, breathing problems and reduced amounts of urine that is dark in colour. This is a very serious reaction.



#### How should adverse events be treated?

It is important to notify a member of the health care team about any symptoms of a transfusion reaction regardless of severity. Severe reactions need immediate treatment.

#### Why does the hospital report adverse events?

Tracking transfusion adverse events is called haemovigilance. This data builds knowledge about what reactions to look for. The data also helps the Blood Service know if we need to make any changes to help reduce the risk of adverse events. The need to test all platelets for bacteria came from haemovigilance data.

### **BLOOD FACT**

All patients are informed of benefits and risks before a transfusion.

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