

Obtaining Informed Consent for Blood and Blood Products

Transfusion transmitted infectious risks:

Australia has one of the safest blood supplies in the world

Agent	Estimated residual risk with tested blood per unit (approximate) Viral risks from ARCBS ¹ data 2006 and 2007 except HTLV which is from 2004-2007
HIV	1 in 35.2 million
Hepatitis C	1 in 3.2 million
Hepatitis B	1 in 1.9 million
HTLV	1 in 14.7 million
Malaria	1 in 4.9 million to 1 in 10.2 million
CMV	May cause serious or life threatening disease in certain patient groups (see below) [#]
Variant CJD	Possible. Not yet reported in Australia

} Each less than 1 in 1 million

For more info and updates refer to ARCBS mediLINK newsletter: www.transfusion.com.au

- The above risks are very small compared to risks of everyday living: chance of **dying in a road accident in Australia is about 1 in 10,000 per year.**
- The commonest non-serious reactions: headache, mild fever, itching/ hives.
- **Transfusion transmitted CMV infection[#]** is an important consideration in certain patient groups (eg immunocompromised, pregnant, neonates) - consult your transfusion service provider for indications for CMV seronegative blood products.
- **most frequently reported serious/ fatal events: TRALI², bacterial contamination and ABO incompatibility** (the later mostly from patient ID errors).

Other serious transfusion risks

(international data - variable recognition/ reporting leads to under estimation)

Per unit transfused unless specified		Morbidity	Mortality
Bacterial sepsis:	Red Cells	1: 40,000 to 500,000	1: 4 million to 8 million
	Platelets	1: 100,000	1: 50,000 to 500,000
Haemolytic reactions:	Acute	1: 12,000 to 77,000	1: 600,000 to 1.5 million
	Delayed	1: 4,000 to 9,000	1: 2.5 million
Anaphylaxis - IgA deficiency		1: 20,000 to 170,000	
Fluid overload/cardiac failure		1: 100 to 700 per patient	
TRALI ²		1: 5,000 to 10,000	1:5 million
TA-GVHD ³		Rare	90% cases fatal

Above table taken in part from ARCBS mediLINK newsletter Dec 2006: www.transfusion.com.au

The CALMAN Chart (Calman 1996) for explaining risk (UK risk per 1 year):

Negligible	< 1,000,000 eg death from a lightning strike
Minimal	1:100,000 - 1:1,000,000 eg death from a train accident
Very low	1:10,000 - 1:100,000 eg death from an accident at work
Low	1:1,000 - 1:10,000 eg death from a road accident
Moderate	1:100 - 1: 1,000 eg death from smoking 10 cigarettes per day
High	> 1:100 eg transmission of chickenpox to susceptible household contacts

¹ARCBS, Australian Red Cross Blood Service. ²TRALI, Transfusion Related Acute Lung Injury.

³TA-GVHD, Transfusion Associated Graft Versus Host Disease.

Informed Consent: Blood and Blood Products

Consent is a process - not a piece of paper

Some of the important elements of informed consent:

Explain:

Cause/likelihood of bleeding/low blood count
(including any uncertainty)?

Nature of the proposed transfusion therapy - what is involved?

Benefits expected?

Risks - common and rare but serious?

Alternatives - including the risk of doing nothing?

Ask:

Is there anything else you would like to know?

Is there anything you do not understand?

Document the consent process - as per hospital/health service policy

Give written information or use diagrams where appropriate.

Use a competent interpreter when the patient is not fluent in English

Note: the transfusion of **autologous blood** is not without risk (such as getting the wrong blood back and bacterial contamination of the unit)
- the same indications for transfusion of homologous blood apply.

More Info? Ask your transfusion service provider or visit:

www.health.sa.gov.au/bloodsafe

and www.transfusion.com.au (ARCBS clinical website)

or for interactive and free education: www.bloodsafelearning.org.au