product transfused and the person receiving it. It is normal practice for you to be monitored during your transfusion, particularly at the beginning. Your nurse will observe you carefully by checking your temperature, pulse, breathing and blood pressure regularly.

# WHAT HAPPENS IF I NEED MORE BLOOD?

Sometimes after a blood transfusion, antibodies to some minor blood groups can occasionally develop. It would be important to know about these for future transfusions or in pregnancy. Antibodies should not make you feel ill. They will be detected when blood tests are done in the future to select appropriate blood for transfusion.

# CAN MY RELATIVES OR FRIENDS DONATE BLOOD FOR ME?

When someone donates blood to be specifically transfused to someone else this is called directed donation. Directed donations are generally avoided in Ireland, the UK and in most European countries. Research has shown that such transfusions are not any safer than carefully selected voluntary donations.

# COULD I HAVE A TRANSFUSION REACTION?

Like any other drug or medical treatment there are potential side effects. Occasionally during a blood transfusion you may feel unwell. This could be due to a transfusion reaction. The symptoms of a reaction can range in severity. Fevers, chills, weakness, breathlessness, feeling sick, vomiting, a rash, back pain, or dark red urine are examples of some of the symptoms of a reaction. If you do feel unwell at any stage during or after the transfusion, inform your nurse/midwife or doctor immediately. There may not be a cause for concern, but as a precaution the nurse may stop the transfusion and call a doctor. They will assess the situation and administer treatment if necessary.

In the event of experiencing any symptoms during or after your blood transfusion inform your nurse or doctor immediately if you are in hospital.

If you experience any symptoms after your blood transfusion and you are not in hospital it is very important to seek medical advice and attention immediately. Contact the appropriate ward or department :

The National Maternity Hospital Telephone 01-6373100.

Or Go straight to your nearest Emergency Department

Or Contact your GP

### PLEASE ENCOURAGE YOUR HEALTHY RELATIVES AND FRIENDS TO BECOME BLOOD DONORS.

## The National Maternity Hospital

### Tel: 01-6373100



# BLOOD TRANSFUSION

This leaflet was designed for your information and prepared by the Hospital Blood Transfusion Committee

# Information for patients

#### WHAT IS A BLOOD TRANSFUSION?

This involves taking blood from a healthy donor and giving it to another person. After donation, blood is separated into different parts (or products) each of which has a different function.

A unit of blood increases iron/haemoglobin levels by carrying oxygen to body tissues.

Platelets are small blood cells that enable blood clotting, which prevents or stops bleeding.

Plasma contains clotting factors and other proteins which also help to prevent or stop bleeding.

# WHY DO PATIENTS NEED BLOOD TRANSFUSIONS?

Some common reasons for why you may need a blood transfusion are:

- To replace blood lost in surgery or in an accident,
- To treat anaemia (lack of red blood cells in the blood)
- To treat bleeding or clotting disorders,

If you lose a significant amount of blood during an operation or during delivery of your baby your doctor may want to replace the blood loss with a blood transfusion immediately, so that you do not suffer serious effects from your blood loss.

If you have anaemia, your body does not have enough red cells to carry the oxygen you need. You may feel tired or breathless and a blood transfusion is an effective treatment when a speedy recovery is needed. You will only be given a blood transfusion if **you really need it**. Your doctor, midwife or nurse will best explain details about why you may need blood.

#### WHAT STEPS ARE TAKEN TO MAKE SURE THAT THE BLOOD PRODUCTS I RECEIVE ARE SAFE?

Currently there are many safeguards in our blood supply aimed at the safety of blood products for patients. Before giving blood, donors must answer questions about their health and risk factors for infection. Only a person who is in good health can give blood. Blood from each accepted donor goes through extensive testing and screening. All donated blood in Ireland is tested for evidence of HIV, Hepatitis B, C and E thus reducing the risk of transmitting these viruses via blood products to negligible levels. Specific groups of patients also require cytomegalovirus (CMV) seronegative and/or irradiated blood components as a further precaution.

# WHAT ARE THE RISKS OF RECEIVING A BLOOD TRANSFUSION?

If a blood transfusion is needed, the risks of not receiving blood products far exceed the risks of having the blood transfusion. The potential risk of getting HIV or Hepatitis from a blood transfusion has received a great deal of publicity. However, the actual risk is very small. Advanced blood product screening procedures employed by the Irish Blood Transfusion Service (IBTS) are aimed at reducing this risk. **The estimated residual viral risks are:** 

**HIV:** less than 1 in 15 million units transfused **Hepatitis C:** less than 1 in 15 million units transfused.

**Hepatitis B:** less than 1 in 2.2 million units transfused.

There is a very small risk of developing a bacterial infection from a blood transfusion (especially platelets). Careful selection, handling and storage of blood products minimises this risk.

Variant CJD (vCJD) is a degenerative neurological disease which is the human equivalent of BSE disease of cattle (mad cow). In Ireland, the chances of an individual developing this disease due to eating infected beef is estimated to be very small due to the lower amount of BSE infected cattle here. It is now known that vCJD can be transmitted through blood transfusion although the risks are believed to be very low. It was estimated in 2011 that approximately two people in Ireland may develop vCJD following exposure to blood over the following 10 years. However no cases have been reported to date in Ireland. Four cases of transmission by transfusion have been reported to date in the UK. There is no test currently available for vCJD but the IBTS have introduced substantial precautions to reduce the risk of transmission.

The most significant risk is of receiving the incorrect blood component, particularly the incorrect blood group of red cells ("ABO incompatible"). This can only be prevented by robust methods to match patient sample to blood unit. One of the most important steps is correct identification of the patient when blood samples are being taken. Therefore, the staff member taking blood samples will ask you to state your name and date of birth to ensure they have the correct patient in addition to checking your identity band.

In considering the risks of transfusion, it may be helpful to know that many common activities e.g. smoking or driving a car carry far greater risks of death or serious injury.

## HOW WILL THE BLOOD BE PREPARED FOR ME?

Before a blood transfusion is given, a blood sample will be taken from you to match your blood with blood from a suitable donor. Prior to starting the transfusion, it is very important to ensure that both you and the unit of blood prepared for you are correctly identified. As part of the identification procedure, the midwife, nurse, doctor or phlebotomist will ask you to state your name and check your armband before taking your blood sample and again before starting your transfusion.

## HOW WILL THE BLOOD TRANSFUSION BE GIVEN TO ME?

It will be given into a vein by a "drip". The length of time this will take can vary, depending on the